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* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	NOV 21	CAS patent coverage to include exemplified prophetic substances identified in English-, French-, German-, and Japanese-language basic patents from 2004-present
NEWS	3	NOV 26	MARPAT enhanced with FSORT command
NEWS	4	NOV 26	CHEMSAFE now available on STN Easy
NEWS	5	NOV 26	Two new SET commands increase convenience of STN searching
NEWS	6	DEC 01	ChemPort single article sales feature unavailable
NEWS	7	DEC 12	GBFULL now offers single source for full-text coverage of complete UK patent families
NEWS	8	DEC 17	Fifty-one pharmaceutical ingredients added to PS
NEWS	9	JAN 06	The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo
NEWS	10	JAN 07	WPIDS, WPINDEX, and WPIX enhanced Japanese Patent Classification Data
NEWS	11	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS	12	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS	13	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS	14	FEB 10	COMPENDEX reloaded and enhanced

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:53:05 ON 10 FEB 2009

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'CAPLUS' ENTERED AT 14:53:17 ON 10 FEB 2009

FILE COVERS 1907 - 10 Feb 2009 VOL 150 ISS 7
FILE LAST UPDATED: 9 Feb 2009 (20090209/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s us20080286688/pn
L1 1 US20080286688/PN

=> d all

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:697110 CAPLUS
DN 143:163099
ED Entered STN: 05 Aug 2005
TI Photosensitive resin composition with excellent photosensitivity and cured
product thereof
IN Koyanagi, Hiroo; Tanaka, Ryutaro; Kametani, Hideaki
PA Nippon Kayaku Kabushiki Kaisha, Japan
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA Japanese

IC ICM G03F007-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005071489	A1	20050804	WO 2005-JP761	20050121
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2552905	A1	20050804	CA 2005-2552905	20050121
	EP 1710626	A1	20061011	EP 2005-703982	20050121
	R: CH, DE, ES, GB, IT, LI				
	CN 1910519	A	20070207	CN 2005-80003090	20050121
	KR 2007001130	A	20070103	KR 2006-716273	20060811
	US 20080286688	A1	20081120	US 2006-585699	20060824

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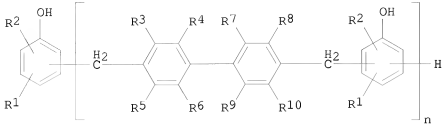
PRAI JP 2004-16751 A 20040126
WO 2005-JP761 W 20050121

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005071489	ICM	G03F007-027
	IPCI	G03F0007-027 [ICM,7]
	IPCR	G03F0007-027 [I,C*]; G03F0007-027 [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A]
	ECLA	G03F007/027; G03F007/038
CA 2552905	IPCI	G03F0007-027 [I,A]
	IPCR	G03F0007-027 [I,C]; G03F0007-027 [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A]
	ECLA	G03F007/027; G03F007/038
EP 1710626	IPCI	G03F0007-027 [ICM,7]
	IPCR	G03F0007-027 [I,C]; G03F0007-027 [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A]
	ECLA	G03F007/027; G03F007/038
CN 1910519	IPCI	G03F0007-027 [I,A]
	IPCR	G03F0007-027 [I,C]; G03F0007-027 [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A]
	ECLA	G03F007/027; G03F007/038
KR 2007001130	IPCI	G03F0007-027 [I,A]; G03F0007-004 [I,A]
US 20080286688	IPCI	G03F0007-004 [I,A]
	NCL	430/285.100; 430/286.100

GI



I

AB Disclosed is a photosensitive resin composition with excellent photosensitivity whose cured product is excellent in adhesiveness, pencil hardness, solvent resistance, acid resistance, heat resistance, gold plating resistance, HAST (highly accelerated temperature and humidity stress test) properties, flame retardance, flexibility and the like. Also disclosed is such a cured product. A photosensitive resin composition is characterized by comprising a reaction product (A) of a compound (a) represented by the formula I (n = 1-20; R1, R2 = H, halo, C1-4-alkyl; R3, R5, R8, R10 = H, halo, methyl; R4, R6, R7, R9 = H, methyl), a compound (b) having an ethylenically unsatd. group and a glycidyl group in a mol. and a polybasic acid anhydride (c), a crosslinking agent (B) and a photopolymn. initiator (C). Also disclosed is a cured product of such a photosensitive resin composition

ST photosensitive resin compn solder resist printed circuit board fabrication

IT Solder resists
(photoresists; photosensitive resin composition with excellent photosensitivity and cured product thereof)

IT Printed circuit boards
(photosensitive resin composition with excellent photosensitivity and cured product thereof)

IT Photoresists
(solder; photosensitive resin composition with excellent photosensitivity and cured product thereof)

IT 93294-97-4, DPCA 60
RL: RCT (Reactant); RACT (Reactant or reagent)
(crosslinking agent in photosensitive resin composition with excellent photosensitivity suitable for printed circuit board fabrication)

IT 71868-10-5, Irgacure 907 82799-44-8, DETX S
RL: CAT (Catalyst use); USES (Uses)
(photopolymn. initiator in photosensitive resin composition with excellent

photosensitivity suitable for printed circuit board fabrication)
IT 860022-07-7P 860022-08-8P 860022-09-9P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive resin composition with excellent photosensitivity suitable
for printed circuit board fabrication)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Nippon Kayaku Co Ltd; JP 200382067 A 2003
(2) Nippon Kayaku Co Ltd; JP 200382067 A 2003
(3) Showa Highpolymer Co Ltd; JP 2002128865 A 2002 CAPLUS
(4) Showa Highpolymer Co Ltd; JP 2002128865 A 2002 CAPLUS
(5) Showa Highpolymer Co Ltd; JP 2002308957 A 2002 CAPLUS
(6) Showa Highpolymer Co Ltd; JP 2002308957 A 2002 CAPLUS

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	6.12	6.34
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.82	-0.82

FILE 'REGISTRY' ENTERED AT 14:53:53 ON 10 FEB 2009
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3
DICTIONARY FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 93294-97-4/RN

L2 1 93294-97-4/RN

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=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L2 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   93294-97-4  REGISTRY
CN   Hexanoic acid, 6-[(1-oxo-2-propen-1-yl)oxy]-,

1,1'-[2-[[3-[[1-oxo-6-[(1-oxo-2-propen-1-yl)oxy]hexyl]oxy]-2,2-bis[[(1-oxo-

6-[(1-oxo-2-propen-1-yl)oxy]hexyl]oxy]methyl]propoxy]methyl]-2-[[[1-oxo-6-
     [(1-oxo-2-propen-1-yl)oxy]hexyl]oxy]methyl]-1,3-propanediyl] ester  (CA
     INDEX NAME)
OTHER CA INDEX NAMES:
CN   Hexanoic acid, 6-[(1-oxo-2-propenyl)oxy]-,
     2-[[3-[[1-oxo-6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]-2,2-bis[[[1-oxo-6-[(1-

oxo-2-propenyl)oxy]hexyl]oxy]methyl]propoxy]methyl]-2-[[[1-oxo-6-[(1-oxo-2-
     propenyl)oxy]hexyl]oxy]methyl]-1,3-propanediyl ester (9CI)
OTHER NAMES:
CN   DPCA 60
CN   Kayarad DPCA 60
DR   99241-43-7
MF   C64 H94 O25
CI   COM
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA  CAplus document type:  Journal; Patent
RL.P   Roles from patents:  BIOL (Biological study); PREP (Preparation); PROC
       (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P  Roles for non-specific derivatives from patents:  BIOL (Biological
       study); PREP (Preparation); PROC (Process); PRP (Properties); USES
       (Uses)
RL.NP  Roles from non-patents:  BIOL (Biological study); PROC (Process); PRP
       (Properties); RACT (Reactant or reagent); USES (Uses)
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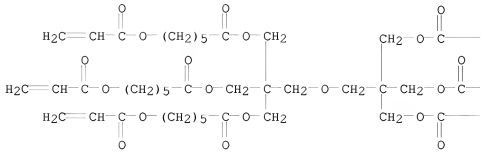
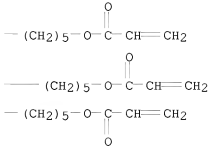
PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

128 REFERENCES IN FILE CA (1907 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
128 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.53	8.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.82

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DICTIONARY FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3

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http://www.cas.org/support/stngen/stndoc/properties.html

=> S 860022-07-7/RN

L3 1 860022-07-7/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L3 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 860022-07-7 REGISTRY
CN 2-Propenoic acid, 4-(oxiranylmethoxy)butyl ester, polymer with MEH 7851SS
(9CI) (CA INDEX NAME)
MF (C10 H16 O4 . Unspecified)x
CI PMS
PCT Manual component, Polyacrylic, Polyother
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); USES (Uses)

CM 1

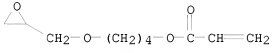
CRN 363137-30-8

CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 119692-59-0
CMF C10 H16 O4



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.53	11.40
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.82

FILE 'REGISTRY' ENTERED AT 14:54:45 ON 10 FEB 2009
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STRUCTURE FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3
DICTIONARY FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 860022-08-8/RN

L4 1 860022-08-8/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L4 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 860022-08-8 REGISTRY
CN 2-Propenoic acid, 4-(oxiranylmethoxy)butyl ester, polymer with MEH 7851-3H
and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)
MF (C10 H16 O4 . C8 H8 O3 . Unspecified)x
CI PMS
PCT Manual component, Polyacrylic, Polyester, Polyester formed, Polyother
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); USES (Uses)

CM 1

CRN 477290-92-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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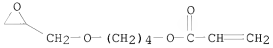
CRN 119692-59-0
CMF C10 H16 O4



CM 3

CRN 85-43-8
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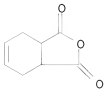

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.53	13.93

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.82

FILE 'REGISTRY' ENTERED AT 14:55:06 ON 10 FEB 2009
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STRUCTURE FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3
DICTIONARY FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of

experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 860022-09-9/RN

L5 1 860022-09-9/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L5 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 860022-09-9 REGISTRY
CN 2-Propenoic acid, 4-(oxiranylmethoxy)butyl ester, polymer with dihydro-2,5-furandione and MEH 7851-3H (9CI) (CA INDEX NAME)
MF (C10 H16 O4 . C4 H4 O3 . Unspecified)x
CI PMS
PCT Manual component, Polyacrylic, Polyester, Polyester formed, Polyother
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); USES (Uses)

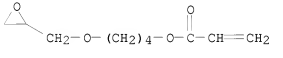
CM 1

CRN 477290-92-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 119692-59-0
CMF C10 H16 O4



CM 3

CRN 108-30-5

CMF C4 H4 O3

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> s 477290-92-9
L6            1 477290-92-9
                (477290-92-9/RN)

=> d

L6   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   477290-92-9  REGISTRY
ED   Entered STN:  20 Dec 2002
CN   MEH 7851-3H  (CA INDEX NAME)
ENTE A biphenyl aralkyl resin (Meiwa Kasei Co.)
MF   Unspecified
CI   PMS, COM, MAN
PCT  Manual registration
SR   CA
LC   STN Files:   CA, CAPLUS, USPAT2, USPATFULL

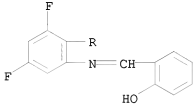
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
               10 REFERENCES IN FILE CA (1907 TO DATE)
                2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

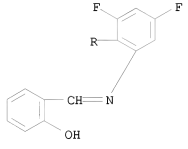

=> s phenol and biphenylene
         454879 PHENOL
           4849 BIPHENYLENE
L7           78 PHENOL AND BIPHENYLENE

=> d 78

L7   ANSWER 78 OF 78  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   340-34-1  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Phenol, 2,2'-[(4,4',6,6'-tetrafluoro[1,1'-biphenyl]-2,2'-
     diyl)bis(nitrilomethylidyne)]bis- (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
```

CN o-Cresol, α,α'-[(4,4',6,6'-tetrafluoro-2,2'-biphenylene)dinitrilo]di- (8CI)
MF C26 H16 F4 N2 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



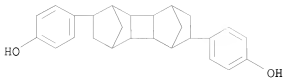


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 70

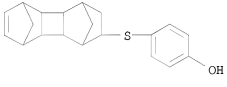
L7 ANSWER 70 OF 78 REGISTRY COPYRIGHT 2009 ACS on STN
RN 17605-23-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Phenol, 4,4'-(decahydro-1,4:5,8-dimethanobiphenylene-2,6-diyl)bis- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4:5,8-Dimethanobiphenylene, phenol deriv.
MF C26 H28 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

=> d 60

L7 ANSWER 60 OF 78 REGISTRY COPYRIGHT 2009 ACS on STN
RN 80324-73-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Phenol, 4-[(1,2,3,4,4a,4b,5,8,8a,8b-decahydro-1,4:5,8-dimethanobiphenylen-2-yl)thio]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4:5,8-Dimethanobiphenylene, phenol deriv.
MF C20 H22 O S
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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FULL ESTIMATED COST	22.39	36.32

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FILE COVERS 1907 - 10 Feb 2009 VOL 150 ISS 7
FILE LAST UPDATED: 9 Feb 2009 (20090209/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s phenol and biphenylene
        269742 PHENOL
          4232 BIPHENYLENE
L8         522 PHENOL AND BIPHENYLENE

=> s l8 and glycidyl?
         54626 GLYCIDYL?
L9         127 L8 AND GLYCIDYL?

=> s l9 and photo?
       1639917 PHOTO?
L10          2 L9 AND PHOTO?

=> d all 1-2

L10  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2007:1442764  CAPLUS
DN   148:66148
ED   Entered STN:  20 Dec 2007
TI   Photosensitive polymer compositions with high sensitivity and
     good thermal stability
IN   Oshimi, Katsuhiko; Tanaka, Ryutaro; Nakanishi, Masataka; Kurihashi, Toru
PA   Nippon Kayaku Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 23pp.
```

CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007328028	A	20071220	JP 2006-157443	20060606
PRAI JP 2006-157443		20060606		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007328028	IPCI	G03F0007-004 [I,A]
	IPCR	G03F0007-004 [I,C]; G03F0007-004 [I,A]
	FTERM	2H025/AA04; 2H025/AA06; 2H025/AA07; 2H025/AA10; 2H025/AA11; 2H025/AA14; 2H025/AA20; 2H025/AB11; 2H025/AB15; 2H025/AC01; 2H025/AD01; 2H025/BC14; 2H025/BC43; 2H025/BC74; 2H025/BC85; 2H025/CA00; 2H025/CC17; 2H025/EA08; 2H025/FA17; 2H025/FA29; 2H025/FA43

AB The compns., especially useful for printed circuit boards, contain (A) aqueous alkali solution-soluble polymers, (B) crosslinkers, (C) photopolymn. initiators, and (D) crystalline epoxy resins of C6H4-m(OGly)Rm[CH2-p-C6H4-p-C6H4CH2C6H4-m(OGly)Rm]nH (n = 1.0-2.0; R = H, C1-4 alkyl, Ph; k = 1-4; Gly = glycidyl) as curing agents. The crystalline epoxy resins may show softening point or m.p. 75-180°. The aqueous alkali solution-soluble polymers may be prepared by reacting compds. having ≥2 epoxy groups with monocarboxylic acids having ethylenic unsatn., then with polybasic acid anhydrides.

ST cryst epoxy photosensitive polymer compn high sensitivity; chloromethylbiphenyl phenol polymer epichlorohydrin ether thermal stability; biphenylene epoxy acrylate tetrahydrophthalic anhydride polymer neg photoresist

IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylates; crystalline epoxy curing agent-containing photoresist compns. with high sensitivity and good thermal stability)

IT Negative photoresists
Printed circuit boards
(crystalline epoxy curing agent-containing photoresist compns. with high sensitivity and good thermal stability)

IT 29570-58-9, DPHA 93294-97-4, DPCA 60
RL: TEM (Technical or engineered material use); USES (Uses)
(crosslinker; crystalline epoxy curing agent-containing photoresist compns. with high sensitivity and good thermal stability)

IT 959857-96-6P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crystalline epoxy curing agent-containing photoresist compns. with high sensitivity and good thermal stability)

IT 208254-04-0DP, reaction product with epichlorohydrin 872507-70-5DP, reaction product with epichlorohydrin
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(curing agent; crystalline epoxy curing agent-containing photoresist compns. with high sensitivity and good thermal stability)
IT 71868-10-5, Irgacure 907 82799-44-8, DETX-S
RL: CAT (Catalyst use); USES (Uses)
(photopolymn. initiator; crystalline epoxy curing agent-containing photoresist compns. with high sensitivity and good thermal stability)

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:532372 CAPLUS
DN 139:101552
ED Entered STN: 11 Jul 2003
TI Bifunctional phenylene ether oligomer, its derivatives, prepreg and laminate use, and production
IN Amagai, Akikazu; Ishii, Kenzi; Hiramatsu, Kiyonari; Miyamoto, Makoto; Ohno, Daisuke; Yamazaki, Katsutoshi; Norisue, Yasumasa
PA Mitsubishi Gas Chemical Company, Inc., Japan
SO U.S. Pat. Appl. Publ., 34 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM C08C019-00
INCL 525370000
CC 35-7 (Chemistry of Synthetic High Polymers)
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20030130438	A1	20030710	US 2002-180507	20020627
	US 6794481	B2	20040921		
	JP 2003012796	A	20030115	JP 2001-196569	20010628
	JP 2003155340	A	20030527	JP 2001-353194	20011119
	JP 3874089	B2	20070131		
	JP 2003183350	A	20030703	JP 2001-387968	20011220
	JP 3900258	B2	20070404		
	JP 2003206333	A	20030722	JP 2002-6211	20020115
	JP 3962901	B2	20070822		
	JP 2003238655	A	20030827	JP 2002-38432	20020215
	JP 3959615	B2	20070815		
	JP 2003252983	A	20030910	JP 2002-53653	20020228
	JP 3879832	B2	20070214		
	JP 2003261743	A	20030919	JP 2002-65735	20020311
	US 20040214004	A1	20041028	US 2004-851290	20040524
	US 6962744	B2	20051108		
	US 20050186430	A1	20050825	US 2005-110917	20050421
	US 7247682	B2	20070724		
	US 20070265423	A1	20071115	US 2007-812892	20070622
	US 7388057	B2	20080617		
	US 20080154006	A1	20080626	US 2008-68925	20080213
	US 7446154	B2	20081104		
PRAI	JP 2001-196569	A	20010628		
	JP 2001-353194	A	20011119		

JP 2001-387968	A	20011220
JP 2002-6211	A	20020115
JP 2002-38432	A	20020215
JP 2002-53653	A	20020228
JP 2002-65735	A	20020311
US 2002-180507	A3	20020627
US 2004-851290	A3	20040524
US 2005-110917	A3	20050421
US 2007-812892	A3	20070622

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20030130438	ICM	C08C019-00
	INCL	525370000
	IPCI	C08C0019-00 [ICM,7]
	IPCR	C08G0065-00 [I,C*]; C08G0065-44 [I,A]; C08G0065-48 [I,A]; H05K0001-03 [N,C*]; H05K0001-03 [N,A]; C08G0065-38 [I,A]
	NCL	525/370.000; 528/219.000; 428/297.400; 525/481.000; 525/504.000; 525/508.000; 525/523.000; 525/533.000; 525/534.000; 528/087.000; 528/102.000; 528/205.000
	ECLA	C08G065/44; C08G065/48B; T05K
JP 2003012796	IPCI	C08G0065-44 [ICM,7]; C08G0065-00 [ICM,7,C*]; C07C0041-50 [ICS,7]; C07C0041-00 [ICS,7,C*]; C07C0043-295 [ICS,7]; C07C0043-00 [ICS,7,C*]
	IPCR	C07C0041-00 [I,C*]; C07C0041-50 [I,A]; C07C0043-00 [I,C*]; C07C0043-295 [I,A]; C08G0065-00 [I,C*]; C08G0065-44 [I,A]
JP 2003155340	IPCI	C08G0065-48 [I,A]; C08G0065-00 [I,C*]
	IPCR	C08G0065-00 [I,C*]; C08G0065-48 [I,A]
JP 2003183350	IPCI	C08G0059-17 [I,A]; C08G0059-00 [I,C*]; C07C0069-54 [I,A]; C07C0069-00 [I,C*]; C08F0299-02 [I,A]; C08F0299-00 [I,C*]
	IPCR	C07C0069-00 [I,C*]; C07C0069-54 [I,A]; C08F0299-00 [I,C*]; C08F0299-02 [I,A]; C08G0059-00 [I,C*]; C08G0059-17 [I,A]
JP 2003206333	IPCI	C08G0059-22 [I,A]; C08G0059-00 [I,C*]; H01L0023-29 [I,A]; H01L0023-31 [I,A]; H01L0023-28 [I,C*]
	IPCR	C08G0059-00 [I,C*]; C08G0059-22 [I,A]; H01L0023-28 [I,C*]; H01L0023-29 [I,A]; H01L0023-31 [I,A]
JP 2003238655	IPCI	C08G0059-24 [I,A]; C08G0059-00 [I,C*]; C08J0005-24 [I,A]; C08L0063-00 [I,A]; C08L0079-00 [I,A]; H05K0001-03 [I,A]
	IPCR	C08J0005-24 [I,C*]; C08J0005-24 [I,A]; C08G0059-00 [I,C*]; C08G0059-24 [I,A]; C08L0063-00 [I,C*]; C08L0063-00 [I,A]; C08L0079-00 [I,C*]; C08L0079-00 [I,A]; H05K0001-03 [I,C*]; H05K0001-03 [I,A]
JP 2003252983	IPCI	C08G0065-48 [I,A]; C08G0065-00 [I,C*]; C08F0220-30 [I,A]; C08F0220-00 [I,C*]; C08F0290-06 [I,A]; C08F0290-00 [I,C*]
	IPCR	C08G0065-00 [I,C*]; C08G0065-48 [I,A]; C08F0220-00 [I,C*]; C08F0220-30 [I,A]; C08F0290-00 [I,C*]; C08F0290-06 [I,A]
JP 2003261743	IPCI	C08L0063-00 [ICM,7]; B32B0015-08 [ICS,7]; C08J0005-24 [ICS,7]; C08L0079-00 [ICS,7]; H05K0001-03 [ICS,7]

	IPCR	C08J0005-24 [I,C*]; C08J0005-24 [I,A]; B32B0015-08 [I,C*]; B32B0015-08 [I,A]; C08L0063-00 [I,C*]; C08L0063-00 [I,A]; C08L0079-00 [I,C*]; C08L0079-00 [I,A]; H05K0001-03 [I,C*]; H05K0001-03 [I,A]
US 20040214004	IPCI	B32B0027-38 [ICM,7]; C08G0065-38 [ICS,7]; C08G0065-48 [ICS,7]; C08G0065-00 [ICS,7,C*]; C08L0063-00 [ICS,7]; B32B0017-04 [ICS,7]
	IPCR	C08G0065-00 [I,C*]; C08G0065-44 [I,A]; C08G0065-48 [I,A]; H05K0001-03 [N,C*]; H05K0001-03 [N,A]
	NCL	428/413.000; 428/297.400; 525/481.000; 525/504.000; 525/508.000; 525/523.000; 525/533.000; 525/534.000; 528/062.000; 528/087.000; 528/205.000; 528/219.000
	ECLA	C08G065/44; C08G065/48B; T05K
US 20050186430	IPCI	B32B0027-04 [I,A]; B32B0027-38 [I,A]; C08G0065-48 [I,A]; C08G0065-00 [I,C*]; C08L0063-00 [I,A]; C08L0071-12 [I,A]; C08L0071-00 [I,C*]
	IPCR	C08G0065-00 [I,C*]; C08G0065-44 [I,A]; C08G0065-48 [I,A]; H05K0001-03 [N,C*]; H05K0001-03 [N,A]; B32B0027-04 [I,C]; B32B0027-04 [I,A]; B32B0027-38 [I,C]; B32B0027-38 [I,A]; C08L0063-00 [I,C]; C08L0063-00 [I,A]; C08L0071-00 [I,C]; C08L0071-12 [I,A]
	NCL	428/413.000; 528/104.000; 525/396.000; 174/255.000; 428/297.400; 525/390.000; 525/391.000; 528/219.000
	ECLA	C08G065/44; C08G065/48B; T05K
US 20070265423	IPCI	C08G0063-66 [I,A]; C08G0063-00 [I,C*]; C07C0069-52 [I,A]; C07C0069-62 [I,A]; C07C0069-00 [I,C*]; C08G0065-44 [I,A]; C08G0065-48 [I,A]; C08G0065-00 [I,C*]; C08L0071-12 [I,A]; C08L0071-00 [I,C*]
	IPCR	C08G0063-00 [I,C]; C08G0063-66 [I,A]; C07C0069-00 [I,C]; C07C0069-52 [I,A]; C07C0069-62 [I,A]; C08G0065-00 [I,C]; C08G0065-44 [I,A]; C08G0065-48 [I,A]; C08L0071-00 [I,C]; C08L0071-12 [I,A]
	NCL	528/361.000; 560/219.000; 560/220.000; 525/391.000; 525/390.000; 525/396.000
US 20080154006	IPCI	C08F0020-06 [I,A]; C08F0020-00 [I,C*]; C07D0303-12 [I,A]; C07D0303-00 [I,C*]; C08G0065-44 [I,A]; C08G0065-48 [I,A]; C08G0065-00 [I,C*]; C08L0071-12 [I,A]; C08L0071-00 [I,C*]
	NCL	526/317.100; 549/561.000

AB A bifunctional phenylene ether oligomer H(OY)a(OX)(YO)bH is obtained by oxidation polymerization of bivalent phenol HOXOH and a monovalent phenol YOH, where X is (substituted) biphenylene, and Y is (substituted) Ph. The 2,6-dimethylphenol-2,2',3,3',5,5'-hexamethyl[1,1'-biphenyl]-4,4'-diol copolymer was end group modified with cyanogen chloride, allyl bromide, or epichlorohydrin followed by acrylic acid, the latter cured acrylate product having a glass transition temperature 198°, dielec. constant (1 GHz) 2.74, and loss tangent (1 GHz) 0.018.

ST phenylene ether oligomer precursor epoxy acrylate thermoset prepreg laminate

IT Laminated materials
(copper-clad; phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)

IT Polyoxyphenylenes
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy, acrylates; phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT Polymerization
(oxidative; of (substituted) biphenylene diol and (substituted) phenol)
IT Sealing compositions
(phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyphenylene-, acrylates; phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT Reinforced plastics
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepregs; phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT 139615-22-8, Kayahard NHN
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(Kayahard NHN; blend with phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT 26834-02-6, Milex 225-3L
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(Milex 225-3L; blend with phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT 25722-66-1, 2,2-Bis(4-cyanatophenyl)propane polymer 33294-14-3, Epiclon 153 96231-83-3, Sumiepoxy ESCN 195XL 171759-10-7, YX400H
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(blend with phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT 101-77-9, 4,4'-Diaminodiphenylmethane
RL: TEM (Technical or engineered material use); USES (Uses)
(crosslinker; blend with phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT 106-89-8DP, Epichlorohydrin, reaction products with phenylene ether oligomer 506-77-4DP, Cyanogen chloride, reaction products with phenylene ether oligomer 4286-55-9DP, 6-Bromo-1-hexanol, reaction products with phenylene ether oligomer 560077-74-9DP, 2,6-Dimethylphenol-2,2',3,3',5,5'-hexamethyl[1,1'-biphenyl]-4,4'-diol

copolymer, allyl ether 560077-74-9DP, allyl ether, homopolymer 560077-74-9DP, glycidyl ethers 561002-51-5P, Ethylene oxide-2,6-dimethylphenol-2,2',3,3',5,5'-hexamethyl[1,1'-biphenyl]-4,4'-diol copolymer acrylate homopolymer 561002-53-7P, 2,6-Dimethylphenol-2,2',3,3',5,5'-hexamethyl[1,1'-biphenyl]-4,4'-diol-propylene oxide copolymer acrylate homopolymer
RL: IMF (Industrial manufacture); PREP (Preparation)
(phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT 560077-74-9P,
2,6-Dimethylphenol-2,2',3,3',5,5'-hexamethyl[1,1'-biphenyl]-4,4'-diol copolymer 560077-77-2P 560077-82-9P 560077-85-2P 561002-47-9P, Ethylene oxide-2,6-dimethylphenol-2,2',3,3',5,5'-hexamethyl[1,1'-biphenyl]-4,4'-diol copolymer acrylate 561002-49-1P, 2,6-Dimethylphenol-2,2',3,3',5,5'-hexamethyl[1,1'-biphenyl]-4,4'-diol-propylene oxide copolymer acrylate
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
IT 79-10-7DP, Acrylic acid, reaction products with phenylene ether oligomer glycidyl ethers 85-43-8DP, Tetrahydrophthalic acid anhydride, reaction products with epoxy acrylates
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(phenylene ether oligomer precursor for epoxy acrylate thermosets and photocurable resins with thermal resistance, low dielec. constant, and loss tangent)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; EP 921158 A2 1999 CAPLUS
(2) Ishii; US 6689920 B2 2004 CAPLUS
(3) Pfaendner; US 5270435 A 1993 CAPLUS

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(FILE 'HOME' ENTERED AT 14:53:05 ON 10 FEB 2009)

FILE 'CAPLUS' ENTERED AT 14:53:17 ON 10 FEB 2009
L1 1 S US20080286688/PN

FILE 'REGISTRY' ENTERED AT 14:53:53 ON 10 FEB 2009
L2 1 S 93294-97-4/RN
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FILE 'REGISTRY' ENTERED AT 14:54:20 ON 10 FEB 2009
L3 1 S 860022-07-7/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

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L4             1 S 860022-08-8/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY

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L5             1 S 860022-09-9/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY
L6             1 S 477290-92-9
L7            78 S PHENOL AND BIPHENYLENE

     FILE 'CAPLUS' ENTERED AT 14:56:45 ON 10 FEB 2009
L8           522 S PHENOL AND BIPHENYLENE
L9           127 S L8 AND GLYCIDYL?
L10            2 S L9 AND PHOTO?

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -1.64      -2.46

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                  substances identified in English-, French-, German-,
                  and Japanese-language basic patents from 2004-present
 NEWS  3  NOV 26  MARPAT enhanced with FSORT command
 NEWS  4  NOV 26  CHEMSAFE now available on STN Easy
 NEWS  5  NOV 26  Two new SET commands increase convenience of STN
                  searching
 NEWS  6  DEC 01  ChemPort single article sales feature unavailable
 NEWS  7  DEC 12  GBFULL now offers single source for full-text
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                  coverage of complete UK patent families
NEWS  8  DEC 17  Fifty-one pharmaceutical ingredients added to PS
NEWS  9  JAN 06  The retention policy for unread STNmail messages
                 will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10  JAN 07  WPIDS, WPINDEX, and WPIX enhanced Japanese Patent
                 Classification Data
NEWS 11  FEB 02  Simultaneous left and right truncation (SLART) added
                 for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 12  FEB 02  GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13  FEB 06  Patent sequence location (PSL) data added to USGENE
NEWS 14  FEB 10  COMPENDEX reloaded and enhanced

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             AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE COVERS 1907 - 10 Feb 2009  VOL 150 ISS 7
FILE LAST UPDATED: 9 Feb 2009  (20090209/ED)
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reclassification data for the third quarter of 2008.

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substance identification.

=> s us3042655/pn
L1 1 US3042655/PN

=> d all

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1962:469722 CAPLUS
DN 57:69722
OREF 57:13916b-d
ED Entered STN: 22 Apr 2001
TI Novolak
IN Massengale, John T.; Bender, Frederick C.
PA American Viscose Corp.
SO 4 pp.
DT Patent
LA Unavailable
CC 43 (Organic Coatings, Inks, and Related Products)

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3042655		19620703	US 1960-4009	19600122

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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 3042655	IPCR	C08G0008-00 [I,C*]; C08G0008-00 [I,A]
	NCL	525/503.000; 525/508.000; 528/137.000; 528/140.000; 528/141.000; 528/143.000; 528/144.000; 528/145.000; 528/212.000; 528/217.000

AB A novolak which differs from the conventional Bakelite type has the formula I in which n is 4-10. The substance is made by treating phenol dissolved in an organic solvent with 4,4'-bis(chloromethyl)biphenyl dissolved in the same solvent in the presence of a metal halide catalyst, preferably ZnCl2. HCl is evolved; after washing with H2O and distilling the solvent, the novolak is obtained as a residue. For a molding or coating, thermosetting resin, the novolak (in powder form) is mixed with an aldehyde in an organic solvent, and a curing agent solution is slowly added. On heat-drying of the reaction mixture, a solid, brittle resin is obtained. This resin is suitable for molding; fillers, a molding catalyst, and a lubricant may be

added. The molded thermoset products compare favorably with a Bakelite phenol-HCHO resin with respect to resistance to chemical attack.
IT Coating(s)
(from phenol condensation products, with 4,4'-bis(chloromethyl)biphenyl, chemical- and heat-resistant)
IT Phenol condensation products
(novolaks, with α,α'-dichloro-p,p'-bitolyl and chemical-and heat-resistant molded products therefrom)
IT 1667-10-3, p,p'-Bitolyl, α,α'-dichloro-
(reaction product with phenol)

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	6.12	6.34

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.82	-0.82

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STRUCTURE FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3
DICTIONARY FILE UPDATES: 8 FEB 2009 HIGHEST RN 1102960-71-3

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http://www.cas.org/support/stngen/stndoc/properties.html

=> S 1667-10-3/RN

L2 1 1667-10-3/RN

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NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
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=> D L2 SQIDE 1-

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L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   1667-10-3  REGISTRY
CN   1,1'-Biphenyl, 4,4'-bis(chloromethyl)-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   p,p'-Bitolyl, α,α'-dichloro- (6CI, 7CI, 8CI)
OTHER NAMES:
CN   4,4'-Bis(chloromethyl)-1,1'-biphenyl
CN   4,4'-Bis(chloromethyl)biphenyl
CN   4,4'-Bis(chloromethyl)diphenyl
CN   NSC 74077
CN   p,p'-Bis(chloromethyl)biphenyl
MF   C14 H12 Cl2
CI   COM
LC   STN Files:   BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX,
       CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2, USPATFULL,
       USPATOLD
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA  CAplus document type:  Journal; Patent; Report
RL.P   Roles from patents:  PREP (Preparation); PRP (Properties); RACT
       (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P  Roles for non-specific derivatives from patents:  PREP (Preparation);
       PRP (Properties); USES (Uses)
RL.NP  Roles from non-patents:  ANST (Analytical study); PREP (Preparation);
       PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES
       (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents:  PREP
       (Preparation); PRP (Properties); USES (Uses)
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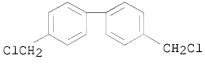


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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

            228 REFERENCES IN FILE CA (1907 TO DATE)
              5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            230 REFERENCES IN FILE CAPLUS (1907 TO DATE)


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FILE COVERS 1907 - 10 Feb 2009  VOL 150 ISS 7
FILE LAST UPDATED: 9 Feb 2009  (20090209/ED)

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=> s l2 and phenol
            230 L2
         269742 PHENOL
L3           13 L2 AND PHENOL

=> d all 1-13

L3   ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2008:1012787  CAPLUS
DN   149:289372
ED   Entered STN:  22 Aug 2008
```

TI High refractive index monomers and transparent polymer compositions for production of optical materials
IN Craciun, Liliana; Polishchuk, Orest; Schriver, George William; Hainz, Rudiger
PA USA
SO U.S. Pat. Appl. Publ., 32pp.
CODEN: USXXCO
DT Patent
LA English
INCL 522166000; 525451000
CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): 73
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20080200582	A1	20080821	US 2008-70183	20080214
	WO 2008101806	A2	20080828	WO 2008-EP51438	20080206
	W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	US 2007-902530P	P	20070220		
	US 2007-997942P	P	20071005		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20080200582	INCL	522166000; 525451000
	IPCI	C08J0003-28 [I,A]; C08G0063-688 [I,A]; C08G0063-00 [I,C*]
	NCL	522/166.000; 525/451.000
WO 2008101806	IPCI	C07D0333-18 [I,A]; C07D0333-00 [I,C*]; C07C0321-20 [I,A]; C07C0321-28 [I,A]; C07C0321-30 [I,A]; C07C0321-00 [I,C*]

AB The invention relates to novel sulfur-containing (meth)acrylic monomers and compns. thereof characterized by high refractive index and useful for optical and industrial applications. The invention also relates to a method for preparing high refractive index polymeric materials and more specifically to a method for formation of UV cast optical lenses and compns. thereof comprising the sulfur-containing (meth)acrylic monomers. Thus, a composition comprising 4-(methylthio)benzyl methacrylate (2.0 g), 2-hydroxyethyl methacrylate (0.62 g), zirconium isopropoxide (70% in isopropanol, 0.55 g), and Irgacure 651 (35 mg) was cast and UV cured to give clear hard plastic parts.
ST sulfur functional arom acrylate monomer transparent polymer optical material
IT Polyoxyalkylenes, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
(acrylate-terminated; high refractive index monomers and transparent polymer compns. for production of optical materials)
IT Monomers
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(acrylic, aromatic and sulfur-containing; high refractive index monomers and
transparent polymer compns. for production of optical materials)
IT Analytical apparatus
Eyeglass lenses
Eyeglasses
Lenses
Medical goods
Optical ROM disks
Optical films
Optical imaging devices
Optical materials
Safety devices
(high refractive index monomers and transparent polymer compns. for production of)
IT Organic glass
RL: TEM (Technical or engineered material use); USES (Uses)
(high refractive index monomers and transparent polymer compns. for production of)
IT Molding of plastics and rubbers
Nanoparticles
Plastic films
Transparent materials
(high refractive index monomers and transparent polymer compns. for production of optical materials)
IT Molded plastics, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(high refractive index monomers and transparent polymer compns. for production of optical materials)
IT Crosslinking
(photochem.; high refractive index monomers and transparent polymer compns. for production of optical materials)
IT Polymerization
(photopolymn.; high refractive index monomers and transparent polymer compns. for production of optical materials)
IT 1048374-08-8P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRPH (Prophetic); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(high refractive index monomers and transparent polymer compns. for production of optical materials)
IT 104609-62-3P 392229-82-2P 1048374-10-2P 1048374-13-5P
1048374-16-8P 1048374-18-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(high refractive index monomers and transparent polymer compns. for production of optical materials)
IT 765-50-4P, 2-Chloromethylthiophene

RL: BYP (Byproduct); IMF (Industrial manufacture); PREP (Preparation)
(in preparation of monomers; high refractive index monomers and transparent
polymer compns. for production of optical materials)
IT 1568-80-5P 6178-58-1P, 2-Phenyl-2-(phenylthio)ethanol 7321-13-3P
13222-17-8P 28569-48-4P, 2,5-Bis(chloromethyl)thiophene 53680-66-3P
117420-69-6P 133921-80-9P 134484-17-6P 194366-17-1P,
2,5-Bis[(2-hydroxyethyl)thiomethyl]thiophene 1048373-58-5P
1048373-62-1P 1048373-64-3P 1048373-66-5P 1048373-73-4P
1048373-81-4P 1048373-83-6P 1048373-88-1P 1048373-91-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(in preparation of monomers; high refractive index monomers and transparent
polymer compns. for production of optical materials)
IT 50-00-0, Formaldehyde, reactions 60-24-2, 2-Mercaptoethanol 79-41-4,
Methacrylic acid, reactions 80-05-7, Bisphenol A, reactions 80-07-9,
4,4'-Dichlorodiphenyl sulfone 80-62-6, Methyl methacrylate 91-13-4,
1,2-Bis(bromomethyl)benzene 96-09-3, Styrene oxide 100-53-8,
Benzylthiol 107-07-3, 2-Chloroethanol, reactions 108-98-5,
Thiophenol,
reactions 109-64-8, 1,3-Dibromopropane 110-02-1, Thiophene
122-60-1,
Phenyl glycidyl ether 149-30-4, 2-Mercaptobenzothiazole 540-63-6,
1,2-Dimercaptoethane 623-24-5, 1,4-Bis(bromomethyl)benzene 699-12-7,
2-Phenylthioethanol 760-93-0, Methacrylic anhydride 814-68-6,
Acryloyl
chloride 920-46-7, Methacryloyl chloride 1073-72-9, 4-(Methylthio)
phenol 1667-10-3 1888-94-4, 2-Chloroethyl methacrylate
3120-74-9, 3-Methyl-4-(methylthio)phenol 3446-90-0,
4-(Methylthio)benzyl alcohol 19362-77-7 27205-03-4 30674-80-7,
2-Isocyanatoethyl methacrylate 37482-11-4, 2-Mercaptoethanol sodium
salt
109240-75-7 150909-91-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of monomers; high refractive index monomers and transparent
polymer compns. for production of optical materials)
IT 7647-01-0, Hydrochloric acid, reactions 10026-13-8, Phosphorus
pentachloride
RL: RGT (Reagent); RACT (Reactant or reagent)
(in preparation of monomers; high refractive index monomers and transparent
polymer compns. for production of optical materials)
IT 39667-73-7P 54667-28-6P 89373-29-5P 95175-52-3P 104609-61-2P
112503-98-7P, preparation 117675-95-3P 137683-15-9P 139439-84-2P
154865-01-7P 345290-67-7P 1021297-22-2P 1021297-32-4P
1021297-37-9P 1048373-30-3P 1048373-32-5P 1048373-34-7P
1048373-36-9P 1048373-38-1P 1048373-39-2P 1048373-41-6P
1048373-42-7P 1048373-44-9P 1048373-46-1P 1048373-48-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(monomer; high refractive index monomers and transparent polymer

compns. for production of optical materials)
IT 41637-38-1, Ethoxylated bisphenol A dimethacrylate 64401-02-1, Ethoxylated bisphenol A diacrylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer; high refractive index monomers and transparent polymer compns. for production of optical materials)
IT 1306-38-3, Ceria, uses 1314-23-4, Zirconia, uses 7440-32-6, Titanium, uses 7440-45-1, Cerium, uses 7440-67-7, Zirconium, uses 13463-67-7, Titania, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(nanoparticles; high refractive index monomers and transparent polymer compns. for production of optical materials)

L3 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:653854 CAPLUS
DN 149:340634
ED Entered STN: 18 Jun 2007
TI A fibrous hypercrosslinked sorbent prepared on PP-ST-DVB matrix via post-crosslinking reaction
AU Liu, Feng; Yuan, Si Guo; Wang, Xiao Li; Polikarpov, A. P.; Shunkevich, A. A.
CS School of Chemical Engineering, Zhengzhou University, Zhengzhou, 450002, Peop. Rep. China
SO Chinese Chemical Letters (2007), 18(5), 588-590
CODEN: CCLEE7; ISSN: 1001-8417
PB Chinese Chemical Society
DT Journal
LA English
CC 66-3 (Surface Chemistry and Colloids)
Section cross-reference(s): 37
AB A fibrous sorbent possessing abundant micropore structure was firstly prepared via post-crosslinking reaction on the polypropylene-(g)styrene-divinylbenzene (PP-ST-DVB) original fiber. Its micromorphol. and sorptive properties were studied, and the novel fibrous hypercrosslinked sorbent has narrow pore-size distribution, small average porous radius (1.90 nm), high sp. surface area (362.31 m2/g), and fine sorptive properties for small organic mols.
ST polypropylene polystyrene divinylbenzene fibrous hypercrosslinked sorbent
IT Pore size distribution
Surface area
(fibrous hypercrosslinked sorbent prepared on polypropylene-styrene-divinylbenzene matrix via post-crosslinking reaction)
IT Sorbents
(fibrous; fibrous hypercrosslinked sorbent prepared on polypropylene-styrene-divinylbenzene matrix via post-crosslinking reaction)
IT Fibrous materials
(sorbents; fibrous hypercrosslinked sorbent prepared on polypropylene-styrene-divinylbenzene matrix via post-crosslinking reaction)
IT 108-88-3, Toluene, properties 108-95-2, Phenol, properties
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(fibrous hypercrosslinked sorbent prepared on polypropylene-styrene-divinylbenzene matrix via post-crosslinking

reaction)
IT 7646-78-8, Tin chloride (SnCl4), uses
RL: CAT (Catalyst use); USES (Uses)
(fibrous hypercrosslinked sorbent prepared on polypropylene-styrene-divinylbenzene matrix via post-crosslinking reaction)
IT 106055-97-4
RL: PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(fibrous hypercrosslinked sorbent prepared on polypropylene-styrene-divinylbenzene matrix via post-crosslinking reaction)
IT 1667-10-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(fibrous hypercrosslinked sorbent prepared on polypropylene-styrene-divinylbenzene matrix via post-crosslinking reaction)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Sherrington, D; J Polym Sci Polym Chem 2001, V39, P2364 CAPLUS
(2) Tsyurupa, M; Reactive Funct Polym 2002, V53, P193 CAPLUS
(3) Tsyurupa, M; Reactive Funct Polym 2006, V66, P768 CAPLUS

L3 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:229651 CAPLUS
DN 146:521309
ED Entered STN: 02 Mar 2007
TI Reaction of 4,4'-bis(chloromethyl)-1,1'-biphenyl and phenol in two-phase medium via phase-transfer catalysis
AU Wang, Maw-Ling; Lee, Ze-Fa
CS Department of Environmental Engineering, Hung Kuang University, Taichung County, Taichung, Shalu, 433, Taiwan
SO Journal of Molecular Catalysis A: Chemical (2007), 264(1-2), 119-127
CODEN: JMCCF2; ISSN: 1381-1169
PB Elsevier B.V.
DT Journal
LA English
CC 22-4 (Physical Organic Chemistry)
Section cross-reference(s): 67
OS CASREACT 146:521309
AB Kinetic study of the phase-transfer catalyzed etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in an alkaline solution of KOH/organic solvent two-phase medium was investigated. The reaction was carried out in a stirred batch reactor under mild operating conditions. During or after completing the reaction, the mono-substituted product [4,4'-(chloromethyl)(phenoxymethyl)-1,1'-biphenyl] and the disubstituted product [4,4'-bis(phenoxymethyl)-1,1'-biphenyl] are both produced. Effects on the reaction due to various operating conditions, such as agitation speed, amount of water, amount of organic solvent, amount of phase-transfer catalyst, amount of potassium hydroxide, kind of phase-transfer catalyst, kind of organic solvent, inorg. salt and temperature were

studied in detail. A rational mechanism of the etherification was proposed based on the exptl. observation and a kinetic model was developed. In examining nine kinds of phase-transfer catalyst, tetraoctylammonium bromide was found to be the best for increasing the reaction rate. The inorg. salts, such as potassium iodide or sodium iodide play an important role in enhancing the reaction rate. Hoffmann elimination is used to explain the peculiar behavior in studying the effect of the KOH on the apparent rate consts. The apparent activation energies for the etherification were Ea1 = 23.7 kcal/mol and Ea2 = 31.5 kcal/mol, resp., using tetra-n-butyl-ammonium bromide (TBAB) as the catalyst.

ST phase transfer catalyzed etherification chloromethylbiphenyl phenol kinetics

IT Counterions
(counterion effects of quaternary ammonium phase transfer catalysts; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Etherification
Etherification kinetics
(etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Polyoxyalkylenes, uses
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Phase transfer catalysts
(etherification; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Activation energy
(for etherification; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Salt effect
(of KI and NaI promotes etherification; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Mass transfer
(of lipophilic phenoxide ion pairs; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Solvent effect
(of organic solvents; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Etherification catalysts
(phase transfer; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT Quaternary ammonium compounds, uses
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(phase-transfer catalysts; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase

medium via phase-transfer catalysis)
IT Quaternary ammonium compounds, uses
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(tri-C8-10-alkylmethyl, chlorides, Aliquat 336, phase-transfer catalyst; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 25322-68-3, Polyethylene glycol
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(PEG 600, phase-transfer catalyst; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 15178-76-4, SB 8
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(SB 8, phase-transfer catalyst, low activity; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 7681-11-0, Potassium iodide, uses 7681-82-5, Sodium iodide, uses
RL: CAT (Catalyst use); USES (Uses)
(catalytic salt effect; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 63405-62-9P, 4,4'-Bis(phenoxymethyl)-1,1'-biphenyl
RL: SPN (Synthetic preparation); PREP (Preparation)
(etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 934336-64-8P, 4-(Chloromethyl)-4'-(phenoxymethyl)-1,1'-biphenyl
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(etherification; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 1667-10-3, 4,4'-Bis(chloromethyl)-1,1'-biphenyl
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(etherification; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 17455-13-9, 18-Crown-6
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(phase-transfer catalyst, poor activity; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 311-28-4, Tetrabutylammonium iodide 1112-67-0, Tetrabutylammonium chloride 1643-19-2, Tetrabutylammonium bromide 4328-13-6, Tetrahexylammonium bromide 14866-33-2, Tetraoctylammonium bromide
RL: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(phase-transfer catalyst; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)

IT 108-95-2, Phenol, reactions
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(precursor for phenoxide in situ; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
IT 1310-58-3, Potassium hydroxide, reactions
RL: RGT (Reagent); RACT (Reactant or reagent)
(reagent for phenoxide formation in situ; etherification of 4,4'-bis(chloromethyl)-1,1'-biphenyl with phenol in two-phase medium via phase-transfer catalysis)
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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L3 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2006:1173064 CAPLUS
DN 145:480451
ED Entered STN: 09 Nov 2006
TI Antireflective hardmask composition and methods for using same
IN Uh, Dong Seon; Oh, Chang Il; Kim, Do Hyeon; Lee, Jin Kuk; Nam, Irina
PA S. Korea
SO U.S. Pat. Appl. Publ., 13pp.
CODEN: USXXCO
DT Patent
LA English
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 37
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060251990	A1	20061109	US 2006-348203	20060206
	KR 2006116133	A	20061114	KR 2005-68348	20050727
	KR 671116	B1	20070117	KR 2005-68890	20050728
	KR 671114	B1	20070117	KR 2005-68891	20050728

KR 671117 B1 20070117 KR 2005-68892 20050728
KR 671120 B1 20070117 KR 2005-68893 20050728
WO 2006121242 A1 20061116 WO 2006-KR909 20060314
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI KR 2005-38406 A 20050509
KR 2005-68348 A 20050727
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20060251990	INCL	430270100
	IPCI	G03C0001-00 [I,A]
	IPCR	G03C0001-00 [I,C]; G03C0001-00 [I,A]
	NCL	430/270.100; 430/271.100
	ECLA	G03F007/09A
KR 2006116133	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]
KR 671116	IPCI	G03F0007-039 [I,A]; G03F0007-00 [I,A]
KR 671114	IPCI	G03F0007-004 [I,A]; G03F0007-039 [I,A]
KR 671117	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]
KR 671120	IPCI	C08G0061-02 [I,A]; C08G0061-00 [I,A]
WO 2006121242	IPCI	G03F0007-039 [I,A]; G03F0007-004 [I,A]
	IPCR	G03F0007-039 [I,C]; G03F0007-039 [I,A]; G03F0007-004 [I,C]; G03F0007-004 [I,A]
	ECLA	G03F007/09A

OS CASREACT 145:480451
AB Hardmask compns. having antireflective properties useful in lithog. processes, methods of using the same, and semiconductor devices fabricated
by such methods, are provided. In some embodiments of the present invention, antireflective hardmask compns. include: (a) a polymer component, which includes one or more of the monomeric units : (b) a crosslinking component; and (c) an acid catalyst.
ST antireflective hardmask polymer synthesis semiconductor fabrication
IT Antireflective films
Etching masks
Photomasks (lithographic masks)
(antireflective hardmask composition and methods for using same)
IT Aminoplasts
RL: RGT (Reagent); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(antireflective hardmask composition and methods for using same)
IT Semiconductor device fabrication
(hard masks; antireflective hardmask composition and methods for using same)
IT Coating materials

(masking; antireflective hardmask composition and methods for using same)
IT 64-67-5, Diethyl sulfate 104-15-4, p-Toluenesulfonic acid, uses
RL: CAT (Catalyst use); USES (Uses)
(antireflective hardmask composition and methods for using same)
IT 9003-35-4P 26834-02-6P 138746-72-2P 875290-68-9P 914090-75-8P 914090-76-9P
RL: DEV (Device component use); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(antireflective hardmask composition and methods for using same)
IT 7440-21-3, Silicon, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(antireflective hardmask composition and methods for using same)
IT 90-02-8, 2-Hydroxybenzaldehyde, reactions 90-15-3, 1-Naphthol 108-95-2, Phenol, reactions 1667-10-3, 4,4'-Bis(chloromethyl)-1,1'-biphenyl 3236-71-3, 4,4'-(9-Fluorenylidene)diphenol 6770-38-3, 1,4-Bis(methoxymethyl)benzene
RL: RCT (Reactant); RACT (Reactant or reagent)
(antireflective hardmask composition and methods for using same)
IT 96-48-0, γ-Butyrolactone
RL: RGT (Reagent); RACT (Reactant or reagent)
(antireflective hardmask composition and methods for using same)
IT 9003-08-1, Cymel 303 17464-88-9, Powderlink 1174
RL: RGT (Reagent); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(antireflective hardmask composition and methods for using same)

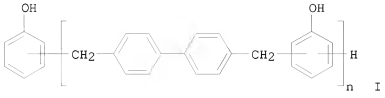
L3 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2006:1147322 CAPLUS
DN 145:480508
ED Entered STN: 02 Nov 2006
TI Thermal printing material using phenol-biphenyl condensate as color developer
IN Tsugawa, Hiroaki; Yoshifuji, Mitsuo; Oshimi, Katsuhiko
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10pp.
CODEN: JKXXAF
DT Patent
LA Japanese
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006297783	A	20061102	JP 2005-123675	20050421
PRAI JP 2005-123675		20050421		

CLASS

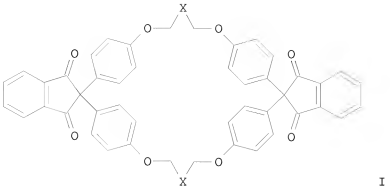
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006297783	IPCI	B41M0005-333 [I,A]; B41M0005-30 [I,C*]
	IPCR	B41M0005-30 [I,C]; B41M0005-333 [I,A]
	FTERM	2H026/AA07; 2H026/AA28; 2H026/BB12; 2H026/BB28; 2H026/BB32; 2H026/DD13; 2H026/DD17

GI



AB The material has a heat-sensitive layer containing a colorless color-former and I (n = 1.0-1.8) as a color-developer. The material gives high d. image with heat, water, and plasticizer resistance.
ST thermal printing material phenol biphenyl condensate color developer
IT Thermal printing materials
(thermal printing material using phenol-biphenyl condensate as color developer)
IT 108-95-2DP, Phenol, reaction products with chloromethylbiphenyl 1667-10-3DP, 4,4'-Bischloromethyl-1,1'-biphenyl, reaction products with phenol
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(thermal printing material using phenol-biphenyl condensate as color developer)

L3 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:744998 CAPLUS
DN 141:395535
ED Entered STN: 13 Sep 2004
TI Design and synthesis of ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations
AU Na, Jeong Eun; Lee, Shim Sung; Kim, Jae Nyoung
CS Department of Chemistry and Institute of Basic Sciences, Chonnam National University, Kwangju, 500-757, S. Korea
SO Tetrahedron Letters (2004), 45(40), 7435-7440
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier B.V.
DT Journal
LA English
CC 28-23 (Heterocyclic Compounds (More Than One Hetero Atom))
OS CASREACT 141:395535
GI



I

AB Four ninhydrin-based cyclophanes, two rectangular type cyclophanes I (X = 1,4-phenylene, 1,1-diphen-4,4'-diyl) and two square type cyclophanes, were designed and synthesized in 8-43% yields.

ST cyclophane ninhydrin based rectangular square prepn; crown ether cyclophane ninhydrin prepn

IT Crown ethers
RL: SPN (Synthetic preparation); PREP (Preparation)
(benzo; preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)

IT Cyclophanes
RL: SPN (Synthetic preparation); PREP (Preparation)
(heterophanes; preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)

IT Macrocyclization
(preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)

IT 108-95-2, Phenol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(Friedel-Crafts alkylation; preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)

IT 786681-08-1
RL: PRP (Properties)
(crystal structure; preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)

IT 623-24-5, 1,4-Bis(bromomethyl)benzene 1667-10-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(macrocyclization; preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)

IT 485-47-2, Ninhydrin
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)
IT 246516-38-1P 786681-04-7P 786681-06-9P 786681-09-2P 786681-11-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)
IT 786681-05-8P 786681-07-0P 786681-10-5P 786681-12-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of rectangular and square ninhydrin-based cyclophanes as potential neutral receptors for quaternary ammonium cations)
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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L3 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:767847 CAPLUS
DN 139:277693
ED Entered STN: 02 Oct 2003
TI Epoxy resins of good fluidity, their compositions, and their cured products having excellent water resistance
IN Akatsuka, Yasumasa; Nakayama, Koji
PA Nippon Kayaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G059-06
ICS C08G059-24
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003277468	A	20031002	JP 2002-79974	20020322
JP 3992181	B2	20071017		
PRAI JP 2002-79974		20020322		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003277468	ICM	C08G059-06
	ICS	C08G059-24
	IPCI	C08G0059-06 [I,A]; C08G0059-24 [I,A]; C08G0059-00 [I,C*]
	IPCR	C08G0059-06 [I,A]; C08G0059-00 [I,C*]; C08G0059-24 [I,A]

AB Epoxy resins prepared by alkali metal hydroxide-catalyzed reaction of epihalohydrins, 4,4'-bis(2-hydroxynaphthylmethyl)biphenyl (I), and phenols excluding I are claimed. Compns. of the epoxy resins, their hardeners, (curing accelerators,) and inorg. fillers are also claimed. Thus, MEH 7851SS (biphenyl novolak), epichlorohydrin, and I were reacted in the presence of NaOH to give an epoxy resin of m.p. 105.4° and melt viscosity 0.0025 Pa-s, 14.5 parts of which was blended with phenol novolak 5.4, Ph3P 0.1, spherical SiO2 57.2, and crushed SiO2 22.8 parts to give a composition showing spiral flow 103 cm and producing a cured product of water absorption 0.82%.

ST hydroxynaphthylmethylbiphenyl epoxy resin silica compn fluidity; water resistant phenolic epoxy resin naphthol derived

IT Phenolic resins, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy; naphthalene ring-containing epoxy resin compns. of high filler content and high fluidity for water-resistant products)

IT Water-resistant materials
(naphthalene ring-containing epoxy resin compns. of high filler content and high fluidity for water-resistant products)

IT Epoxy resins, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(phenolic; naphthalene ring-containing epoxy resin compns. of high filler content and high fluidity for water-resistant products)

IT 603-35-0, Triphenylphosphine, uses
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES

(Uses)
(curing accelerators; naphthalene ring-containing epoxy resin compns. of
high filler content and high fluidity for water-resistant products)
IT 7631-86-9, Silica, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fillers; naphthalene ring-containing epoxy resin compns. of high filler
content and high fluidity for water-resistant products)
IT 1310-73-2, Sodium hydroxide, uses
RL: CAT (Catalyst use); USES (Uses)
(naphthalene ring-containing epoxy resin compns. of high filler content and
high fluidity for water-resistant products)
IT 606968-62-1P, 4,4'-Bis(2-hydroxynaphthylmethyl)biphenyl-epichlorohydrin-formaldehyde-MEH 7851SS-phenol copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(naphthalene ring-containing epoxy resin compns. of high filler content and
high fluidity for water-resistant products)
IT 390401-83-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(naphthalene ring-containing epoxy resin compns. of high filler content and
high fluidity for water-resistant products)
IT 135-19-3, β-Naphthol, reactions 1667-10-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(naphthalene ring-containing epoxy resin compns. of high filler content and
high fluidity for water-resistant products)

L3 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:534031 CAPLUS
DN 137:93597
ED Entered STN: 17 Jul 2002
TI Preparation and use of phenoxyalkylamino-linked dimers as sodium channel modulators
IN Marquess, Daniel; Choi, Seok-ki; Beattie, David T.; Griffin, John H.; Armstrong, Scott; Church, Timothy J.; Jenkins, Thomas E.
PA Advanced Medicine, Inc., USA
SO U.S., 121 pp., Cont.-in-part of U. S. Ser. No. 325,563, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM C07D245-02
ICS C07D211-70; C07D333-12; A61K031-33; A61K031-44
INCL 514183000
CC 25-9 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 28, 63
FAN.CNT 31

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	US 6420354	B1	20020716	US 1999-458107	19991208
	CA 2318806	A1	19991216	CA 1999-2318806	19990607
	CA 2319142	A1	19991216	CA 1999-2319142	19990607
	CA 2319153	A1	19991216	CA 1999-2319153	19990607
	WO 9963984	A1	19991216	WO 1999-US11801	19990607
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	WO 9963932	A2	19991216	WO 1999-US12724	19990607
	WO 9963932	A3	20000203		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	WO 9964045	A1	19991216	WO 1999-US12754	19990607
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9945511	A	19991230	AU 1999-45511	19990607
	AU 9946726	A	19991230	AU 1999-46726	19990607
	EP 1085879	A2	20010328	EP 1999-928442	19990607
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	EP 1085890	A1	20010328	EP 1999-930122	19990607
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	EP 1089749	A1	20010411	EP 1999-928447	19990607
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002517437	T	20020618	JP 2000-553053	19990607
	ZA 2000004562	A	20011130	ZA 2000-4562	20000831
	ZA 2000004563	A	20011130	ZA 2000-4563	20000831
	ZA 2000004564	A	20011130	ZA 2000-4564	20000831
	US 6479498	B1	20021112	US 2001-39699	20011109
	US 20030044845	A1	20030306	US 2002-75017	20020213
PRAI	US 1998-88465P	P	19980608		
	US 1998-93068P	P	19980716		
	US 1999-325563	B2	19990604		
	US 1999-327096	B1	19990607		
	WO 1999-US11801	W	19990607		
	WO 1999-US12724	W	19990607		

WO 1999-US12754	W	19990607	
US 1999-458107	A1	19991208	
US 2000-499176	B1	20000207	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6420354	ICM	C07D245-02
	ICS	C07D211-70; C07D333-12; A61K031-33; A61K031-44
	INCL	514183000
	IPCI	C07D0245-02 [ICM,7]; C07D0245-00 [ICM,7,C*]; C07D0211-70 [ICS,7]; C07D0211-00 [ICS,7,C*]; C07D0333-12 [ICS,7]; C07D0333-00 [ICS,7,C*]; A61K0031-33 [ICS,7]; A61K0031-44 [ICS,7]
	IPCR	A61K0047-48 [I,C*]; A61K0047-48 [I,A]; C07D0239-00 [I,C*]; C07D0239-48 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	NCL	514/183.000; 514/357.000; 514/438.000; 514/651.000; 540/470.000; 546/334.000; 549/075.000; 564/353.000
	ECLA	A61K047/48H4M; A61K047/48R4; C07D239/48B4; G01N033/68F; S01N
CA 2318806	IPCI	A61K0031-58 [ICM,6]; A61K0038-00 [ICS,6]; A61K0039-00 [ICS,6]; A61K0051-00 [ICS,6]; C07K0002-00 [ICS,6]; C07K0004-00 [ICS,6]; C07D0401-04 [ICS,6]; C07D0401-12 [ICS,6]; C07D0401-00 [ICS,6,C*]; A61K0039-395 [ICS,6]; G01N0033-53 [ICS,6]; G01N0033-543 [ICS,6]; G01N0033-566 [ICS,6]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F
CA 2319142	IPCI	A61K0031-00 [ICM,6]; A61K0038-00 [ICS,6]; A61K0039-00 [ICS,6]; A61K0051-00 [ICS,6]; C07K0002-00 [ICS,6]; C07K0004-00 [ICS,6]; A61K0039-395 [ICS,6]; A61K0039-44 [ICS,6]; G01N0033-53 [ICS,6]; G01N0033-543 [ICS,6]; G01N0033-566 [ICS,6]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*];

		G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F
CA 2319153	IPCI	A61K0031-15 [ICM,6]; A61K0038-00 [ICS,6]; A61K0039-00 [ICS,6]; A61K0051-00 [ICS,6]; C07K0002-00 [ICS,6]; C07K0004-00 [ICS,6]; A61K0039-395 [ICS,6]; A61K0039-44 [ICS,6]; G01N0033-53 [ICS,6]; G01N0033-543 [ICS,6]; G01N0033-566 [ICS,6]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F
WO 9963984	IPCI	A61K0031-15 [ICM]; A61K0038-00 [ICS]; A61K0039-00 [ICS]; A61K0039-44 [ICS]; A61K0039-395 [ICS]; A61K0051-00 [ICS]; C07K0002-00 [ICS]; C07K0004-00 [ICS]; G01N0033-53 [ICS]; G01N0033-543 [ICS]; G01N0033-566 [ICS]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N
WO 9963932	IPCI	A61K [ICM]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N
WO 9964045	IPCI	A61K0038-00 [ICM]; A61K0039-00 [ICS]; A61K0039-44 [ICS]; A61K0039-395 [ICS]; A61K0051-00 [ICS]; C07K0002-00 [ICS]; C07K0004-00 [ICS]; G01N0033-53 [ICS]; G01N0033-543 [ICS]; G01N0033-566 [ICS]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00

		[I,C*]; C07K0002-00 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N
AU 9945511	IPCI	A61K0038-00 [ICM]; A61K0039-00 [ICS]; A61K0039-44 [ICS]; A61K0039-395 [ICS]; A61K0051-00 [ICS]; C07K0002-00 [ICS]; C07K0004-00 [ICS]; G01N0033-53 [ICS]; G01N0033-543 [ICS]; G01N0033-566 [ICS]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N
AU 9946726	IPCI	A61K0031-15 [ICM]; A61K0038-00 [ICS]; A61K0039-00 [ICS]; A61K0039-44 [ICS]; A61K0039-395 [ICS]; A61K0051-00 [ICS]; C07K0002-00 [ICS]; C07K0004-00 [ICS]; G01N0033-53 [ICS]; G01N0033-543 [ICS]; G01N0033-566 [ICS]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N
EP 1085879	IPCI	A61K0031-58 [ICM,6]; A61K0038-00 [ICS,6]; A61K0039-00 [ICS,6]; A61K0039-44 [ICS,6]; A61K0039-395 [ICS,6]; A61K0051-00 [ICS,6]; C07D0401-04 [ICS,6]; C07D0401-12 [ICS,6]; C07D0401-00 [ICS,6,C*]; C07K0002-00 [ICS,6]; C07K0004-00 [ICS,6]; G01N0033-53 [ICS,6]; G01N0033-543 [ICS,6]; G01N0033-566 [ICS,6]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N

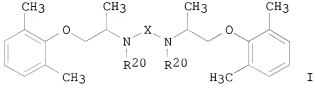
EP 1085890	IPCI	A61K0038-00 [ICM,6]; A61K0039-00 [ICS,6]; A61K0039-44 [ICS,6]; A61K0039-395 [ICS,6]; A61K0051-00 [ICS,6]; C07K0002-00 [ICS,6]; C07K0004-00 [ICS,6]; G01N0033-53 [ICS,6]; G01N0033-543 [ICS,6]; G01N0033-566 [ICS,6]; C07B0061-00 [ICS,6]; C07D0239-48 [ICS,6]; C07D0239-00 [ICS,6,C*]; C07D0241-20 [ICS,6]; C07D0241-00 [ICS,6,C*]; C07D0401-14 [ICS,6]; C07D0253-06 [ICS,6]; C07D0253-00 [ICS,6,C*]; C07D0273-00 [ICS,6]; C07D0211-22 [ICS,6]; C07D0211-00 [ICS,6,C*]; C07D0401-04 [ICS,6]; C07D0401-00 [ICS,6,C*]; C07C0217-16 [ICS,6]; C07C0217-00 [ICS,6,C*]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N
EP 1089749	IPCI	A61K0038-00 [ICM,6]; A61K0039-00 [ICS,6]; A61K0039-44 [ICS,6]; A61K0039-395 [ICS,6]; A61K0051-00 [ICS,6]; C07K0002-00 [ICS,6]; C07K0004-00 [ICS,6]; G01N0033-53 [ICS,6]; G01N0033-543 [ICS,6]; G01N0033-566 [ICS,6]; C07B0061-00 [ICS,6]; C07D0239-48 [ICS,6]; C07D0239-00 [ICS,6,C*]; C07D0241-20 [ICS,6]; C07D0241-00 [ICS,6,C*]; C07D0401-14 [ICS,6]; C07D0253-06 [ICS,6]; C07D0253-00 [ICS,6,C*]; C07D0273-00 [ICS,6]; C07D0211-22 [ICS,6]; C07D0211-00 [ICS,6,C*]; C07D0401-04 [ICS,6]; C07D0401-00 [ICS,6,C*]; C07C0217-16 [ICS,6]; C07C0217-00 [ICS,6,C*]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00 [I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N
JP 2002517437	IPCI	C07C0217-16 [ICM,7]; C07C0217-00 [ICM,7,C*]; A61K0045-00 [ICS,7]; A61P0043-00 [ICS,7]; C07B0061-00 [ICS,7]; C07K0002-00 [ICS,7]; G01N0033-15 [ICS,7]; G01N0033-50 [ICS,7]; G01N0033-566 [ICS,7]
	IPCR	G01N0033-50 [I,C*]; G01N0033-50 [I,A]; A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0047-48 [I,C*]; A61K0047-48 [I,A]; A61P0043-00 [I,C*]; A61P0043-00 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0217-00 [I,C*]; C07C0217-16 [I,A]; C07K0002-00

[I,C*]; C07K0002-00 [I,A]; C40B0020-00 [I,C*]; C40B0020-00 [I,A]; C40B0040-02 [I,C*]; C40B0040-02 [I,A]; C40B0050-06 [I,C*]; C40B0050-06 [I,A]; G01N0033-15 [I,C*]; G01N0033-15 [I,A]; G01N0033-566 [I,C*]; G01N0033-566 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]

ZA 2000004562	IPCI	A61K [ICM,7]; C07K [ICS,7]; G01N [ICS,7]
ZA 2000004563	IPCI	A61K [ICM,7]; C07K [ICS,7]; G01N [ICS,7]
ZA 2000004564	IPCI	A61K [ICM,7]; C07K [ICS,7]; G01N [ICS,7]
US 6479498	IPCI	C07D0239-42 [ICM,7]; C07D0239-48 [ICS,7]; C07D0239-00 [ICS,7,C*]; A61K0031-505 [ICS,7]
	IPCR	C07D0239-00 [I,C*]; C07D0239-48 [I,A]
	NCL	514/256.000; 514/275.000; 544/325.000; 544/326.000; 544/327.000; 544/329.000
	ECLA	A61K047/48H4M; C07D239/48B4
US 20030044845	IPCI	G01N0033-53 [ICM,7]; C07D0041-02 [ICS,7]
	IPCR	A61K0047-48 [I,C*]; A61K0047-48 [I,A]; G01N0033-68 [I,C*]; G01N0033-68 [I,A]
	NCL	435/007.100; 546/140.000
	ECLA	A61K047/48H4M; A61K047/48R4; G01N033/68F; S01N

OS MARPAT 137:93597

GI



I

AB Title compds. I [R20 = H, Me, ethyl; X = linker X'-Z-(Y'-Z)m-Y''-Z-X'; m = 0-20; X' = O, S, NR, CO, CO2, CONR, CS, CSO, CSNR, covalent bond; Z = alkylene, cycloalkylene, alkenylene, alkynylene, cycloalkenylene, arylene, heteroarylene, heterocyclene, covalent bond; Y', Y'' = carboxamide, amido, ureido, amidino, etc., covalent bond; R, R', R" = H, alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, aryl, heteroaryl, heterocyclic] were prepared as sodium channel modulators. For instance, 2,6-dimethylphenol was alkylated with chloroacetone (DMF, K2CO3, KI, 80°), the product reacted with 1,8-diamino-3,6-dioxaoctane (EtOH, 12 h, 25°) and the resulting imine reduced (NaBH4, 2 h, 25°) to give I [R20 = H; X = (CH2)2-O-(CH2)2-O-(CH2)2]. I are useful in the treatment of pain.

ST pain sodium channel modulator phenol arylether prepn

IT Analgesics
Human
Pain
(preparation and use of phenoxyalkylamino-linked dimers as sodium channel modulators)

IT Sodium channel
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation and use of phenoxyalkylamino-linked dimers as sodium channel modulators)

IT 130800-99-6 130801-05-7 1026191-95-6 1026400-10-1 1026613-97-7
1026806-00-7 1026862-57-6 1026888-92-5 1027914-34-6 1098609-23-4
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1098609-29-0 1098609-30-3 1098609-31-4 1098609-32-5 1098609-33-6
1098609-34-7 1098609-35-8 1098609-36-9 1098609-37-0 1098609-38-1
1098609-39-2 1098609-40-5 1098609-41-6 1098609-42-7 1098609-43-8
1098609-44-9 1098609-45-0 1098609-46-1 1098609-47-2 1098609-48-3
RL: PRPH (Prophetic)
(Preparation and use of phenoxyalkylamino-linked dimers as sodium channel modulators)

IT 442626-25-7P 442626-26-8P 442626-27-9P 442626-28-0P 442626-29-1P
442626-30-4P 442626-31-5P 442626-32-6P 442626-33-7P 442626-34-8P
442626-35-9P 442626-36-0P 442626-37-1P 442626-38-2P 442626-39-3P
442626-40-6P 442626-41-7P 442626-42-8P 442626-43-9P 442626-44-0P
442626-45-1P 442626-46-2P 442626-47-3P 442626-48-4P 442626-49-5P
442626-50-8P 442626-51-9P 442626-52-0P 442626-53-1P 442626-54-2P
442626-56-4P 442626-57-5P 442626-58-6P 442626-59-7P 442626-60-0P
442626-61-1P 442626-62-2P 442626-63-3P 442626-64-4P 442626-65-5P
442626-66-6P 442626-67-7P 442626-68-8P 442626-69-9P 442626-70-2P
442626-71-3P 442626-72-4P 442626-73-5P 442626-74-6P 442626-75-7P
442626-76-8P 442626-77-9P 442626-78-0P 442626-79-1P 442626-80-4P
442626-81-5P 442626-82-6P 442626-83-7P 442626-84-8P 442626-85-9P
442626-86-0P 442626-87-1P 442626-88-2P 442626-89-3P 442626-90-6P
442626-91-7P 442626-92-8P 442626-94-0P 442626-96-2P 442626-97-3P
442626-98-4P 442626-99-5P 442627-00-1P 442627-01-2P 442627-02-3P
442627-03-4P 442627-04-5P 442627-05-6P 442627-06-7P 442627-07-8P
442627-08-9P 442627-09-0P 442627-10-3P 442627-11-4P 442627-12-5P
442627-14-7P 442627-16-9P 442627-18-1P 442627-20-5P 442627-22-7P
442627-24-9P 442627-26-1P 442627-28-3P 442627-30-7P 442627-32-9P
442627-34-1P 442627-36-3P 442627-38-5P 442627-40-9P 442627-42-1P
442627-44-3P 442627-46-5P 442627-47-6P 442627-48-7P 442627-49-8P
442627-50-1P 442627-51-2P 442627-52-3P 442627-53-4P 442627-54-5P
442627-55-6P 442627-56-7P 442627-57-8P 442627-58-9P 442627-59-0P
442627-60-3P 442627-61-4P 442627-62-5P 442627-63-6P 442627-64-7P
442627-65-8P 442627-66-9P 442627-67-0P 442627-68-1P 442627-69-2P
442627-70-5P 442627-71-6P 442627-72-7P 442627-73-8P 442627-74-9P
442627-75-0P 442627-76-1P 442627-77-2P 442627-78-3P 442627-79-4P
442627-80-7P 442627-81-8P 442627-82-9P 442627-83-0P 442627-84-1P
442627-85-2P 442627-86-3P 442627-87-4P 442627-88-5P 442627-89-6P
442627-90-9P 442627-91-0P 442627-92-1P 442627-93-2P 442627-94-3P
442627-95-4P 442627-96-5P 442627-97-6P 442627-98-7P 442627-99-8P
442628-00-4P 442628-01-5P 442628-02-6P 442628-03-7P 442628-04-8P
442628-05-9P 442628-06-0P 442628-07-1P 442628-08-2P 442628-09-3P
442628-10-6P 442628-11-7P 442628-12-8P 442628-13-9P 442628-14-0P
442628-15-1P 442628-16-2P 442628-17-3P 442628-18-4P 442628-19-5P
442628-20-8P 442628-21-9P 442628-22-0P 442628-23-1P 442628-24-2P
442628-25-3P 442628-26-4P 442628-27-5P 442628-28-6P 442628-29-7P
442628-30-0P 442628-31-1P 442628-32-2P 442628-33-3P 442628-34-4P
442628-36-6P 442628-37-7P 442628-42-4P 442629-08-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; preparation and use of phenoxyalkylamino-linked dimers as sodium channel modulators)
IT 3218-45-9P 14279-79-9P 38594-42-2P, 2,3-Dichlorobenzyl alcohol 53012-41-2P 61920-61-4P 130833-20-4P 154474-89-2P 188951-29-3P 194027-20-8P 442628-35-5P 442628-39-9P 442628-40-2P 442628-43-5P 442628-44-6P 442628-45-7P 442628-46-8P 442628-47-9P 442628-48-0P 442628-49-1P 442628-50-4P 442628-51-5P 442628-52-6P 442628-53-7P 442628-54-8P 442628-55-9P 442628-56-0P 442628-57-1P 442628-58-2P 442628-59-3P 442628-61-7P 442628-62-8P 442628-63-9P 442628-64-0P 442628-65-1P 442628-66-2P 442628-67-3P 442628-68-4P 442628-69-5P 442628-70-8P 442628-71-9P 442628-72-0P 442628-73-1P 442628-74-2P 442628-75-3P 442628-76-4P 442628-77-5P 442628-79-7P 442628-81-1P 442628-83-3P 442628-84-4P 442628-86-6P 442628-88-8P 442628-90-2P 442628-91-3P 442628-92-4P 442628-93-5P 442628-94-6P 442628-95-7P 442628-96-8P 442628-97-9P 442628-98-0P 442628-99-1P 442629-00-7P 442629-01-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation and use of phenoxyalkylamino-linked dimers as sodium channel modulators)
IT 78-95-5, Chloroacetone 96-13-9, 2,3-Dibromo-1-propanol 96-21-9, 1,3-Dibromo-2-propanol 101-77-9, 4,4'-Diaminodiphenylmethane 105-83-9,
N,N-Bis(3-aminopropyl)methylamine 107-15-3, 1,2-Diaminoethane, reactions
109-76-2, 1,3-Diaminopropane 110-60-1, 1,4-Diaminobutane 110-85-0, Piperazine, reactions 111-91-1, Bis(2-chloroethoxymethane) 112-26-5, 1,2-Bis(2-chloroethoxyethane) 124-09-4, 1,6-Diaminohexane, reactions 373-44-4, 1,8-Diaminooctane 462-94-2, 1,5-Diaminopentane 525-64-4, 2,7-Diaminofluorene 534-08-7, 1,3-Diiodo-2-propanol 539-48-0, α,α'-Diamino-p-xylene 576-26-1, 2,6-Dimethylphenol 600-05-5, 2,3-Dibromopropionic acid 616-29-5, 1,3-Diamino-2-propanol 623-24-5, α,α'-Dibromo-p-xylene 623-97-2, Carbonic acid bis(2-chloroethyl) ester 626-15-3, α,α'-Dibromo-m-xylene 626-19-7, Isophthalaldehyde 627-31-6, 1,3-Diiodopropane 629-09-4, 1,6-Diiodohexane 638-56-2, Bis[2-(2-chloroethoxy)ethyl]ether 821-06-7,
trans-1,4-Dibromo-2-butene 821-10-3, 1,4-Dichloro-2-butyne 871-76-1, 2,2'-Thiobis(ethylamine) 929-59-9, 1,8-Diamino-3,6-dioxaoctane 932-41-2, 2,3-Thiophenedicarboxaldehyde 932-95-6, 2,5-Thiophenedicarboxaldehyde 1123-63-3, 4-Chloro-2,6-dimethylphenol 1477-55-0, α,α'-Diamino-m-xylene 1667-10-3
1871-57-4, 3-Chloro-2-chloromethyl-1-propene 2092-49-1 2157-24-6, Bis(3-aminopropyl)ether 2233-18-3, 3,5-Dimethyl-4-hydroxybenzaldehyde 2417-04-1, 3,3',5,5'-Tetramethyl[1,1'-biphenyl]-4,4'-diol 2549-93-1, 1,4-Cyclohexanebis-methylamine 2579-20-6,
1,3-Cyclohexanebis(methylamine) 2615-25-0, trans-1,4-Diaminocyclohexane 2716-10-1 2752-17-2, 1,5-Diamino-3-oxapentane 3138-86-1, 2,3-Bis(bromomethyl)quinoxaline 3328-70-9, 5-Formylsalicylaldehyde 3344-70-5, 1,12-Dibromododecane 3674-13-3, Ethyl 2,3-dibromopropionate 3967-55-3, 4,5-Dichloro-1,3-dioxolan-2-one 4097-88-5,

N,N-Bis(2-aminoethyl)methylamine 4246-51-9,
4,7,10-Trioxa-1,13-tridecanediamine 4338-95-8 4549-31-9,
1,7-Dibromoheptane 4549-32-0, 1,8-Dibromooctane 4549-33-1,
1,9-Dibromononane 5370-01-4, Mexiletine hydrochloride 5431-44-7,
2,6-Pyridinedicarboxaldehyde 6065-82-3, Ethyl 2,2-diethoxyacetate
6334-18-5, 2,3-Dichlorobenzaldehyde 6334-96-9, Bis(4-chlorobutyl)ether
6941-69-1 7209-38-3, 1,4-Bis(3-aminopropyl)piperazine 7300-34-7
7310-95-4, 2-Hydroxy-5-methylisophthalaldehyde 7328-91-8,
2,2-Dimethyl-1,3-diaminopropane 7703-74-4, 2,6-Bis(bromomethyl)pyridine
16355-92-3, 1,10-Diiododecane. 16696-65-4, 1,11-Dibromoundecane
16813-43-7, N,N'-Bis(2-chloroethyl)oxamide 17954-12-0 21587-74-6,
3,9-Bis(3-aminopropyl)-2,4,8,10-tetraoxaspiro[5,5]undecane 24613-65-8,
1,9-Diiodononane 24772-63-2, 1,8-Diiodooctane 25513-64-8
31828-71-4,
Mexiletine 36839-55-1, 1,2-Bis(2-iodoethoxy)ethane 45223-18-5,
1,16-Dibromohexadecane 49590-51-4, Bis(2-formylphenyl)ether
52118-10-2
58342-57-7 64028-78-0 64621-35-8 85275-45-2,
N-Boc-3-hydroxypiperidine 87816-56-6, 1,5-Diamino-3-mercaptopentane
89151-44-0, N-Boc-4-piperidinethanol 91452-27-6 103057-44-9,
N-Boc-3-pyrrolidinol 118811-03-3, N-Boc-2-piperidineethanol
146667-84-7, N-Boc-3-piperidineethanol 152120-54-2 442628-38-8
442628-41-3 442628-60-6 442628-78-6 442628-80-0 442628-85-5
442628-87-7 442628-89-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation and use of phenoxyalkylamino-linked dimers as
sodium
channel modulators)
RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L3 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1998:307266 CAPLUS
DN 129:54744
OREF 129:11413a,11416a
ED Entered STN: 25 May 1998
TI Bis(aryloxymethyl)arenes, their preparation, and manufacture of novolaks therefrom
IN Hasegawa, Ryoichi; Akatsuka, Yasumasa; Watanabe, Eiko
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07C043-20
ICS B01J031-02; C07C041-01; C07C043-257; C08G010-02; C07B061-00
CC 35-5 (Chemistry of Synthetic High Polymers)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10130186	A	19980519	JP 1996-300879	19961028
PRAI JP 1996-300879		19961028		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 10130186	ICM	C07C043-20
	ICS	B01J031-02; C07C041-01; C07C043-257; C08G010-02; C07B061-00
	IPCI	C07C0043-20 [ICM,6]; B01J0031-02 [ICS,6]; C07C0041-01 [ICS,6]; C07C0043-257 [ICS,6]; C08G0010-02 [ICS,6]; C07B0061-00 [ICS,6]
	IPCR	B01J0031-02 [I,C*]; B01J0031-02 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0041-00 [I,C*]; C07C0041-01 [I,A]; C07C0043-00 [I,C*]; C07C0043-20 [I,A]; C07C0043-257 [I,A]; C08G0010-00 [I,C*]; C08G0010-02 [I,A]

OS MARPAT 129:54744

AB R1OCH2R2CH2OR3 [R2 = (un)substituted C6H4, C6H4XC6H4, C10H6; R1, R2 = (un)substituted Ph, C6H4XPh, C10H7; the substituents are alkyl, alkenyl, aryl, halo, aralkyl; X = O, CH2, direct link] are prepared by reacting bis(halomethyl)arenes with aromatic hydroxy compds. in the presence of alkaline substances. R5CH2R2CH2(R4CH2R2CH2)mR6 (R2, R4 defined as R2 above having ≥1 OH substituent; R5, R6 defined as R1 above having ≥1 OH substituent; m = 0-10) are prepared via the above diethers without formation of byproducts and gelation. Thus, 4,4'-bis(chloromethyl)biphenyl was gradually added to a mixture of DMSO, K2CO3, and PhOH at 75° over 0.5 h, and the reaction mixture was further stirred at 85° for 2 h to give 4,4'-bis(phenoxymethyl)biphenyl. This further reacted with PhOH and MeSO3H at 150° for 1 h to give 4,4'-bis(hydroxybenzyl)biphenyl showing softening point 102° and melt viscosity 1.0 P at 150°.

ST aryloxymethylarene prepn material novolak; arene bisaryloxymethyl prepn material novolak; halomethylarene dehydrohalogenation phenol

IT Poly(arylenealkylenes)
RL: IMF (Industrial manufacture); PREP (Preparation)
(hydroxy-containing; preparation of bis(aryloxymethyl)arenes and novolaks therefrom)

IT Phenolic resins, preparation
RL: IMF (Industrial manufacture); PREP (Preparation)
(novolak; preparation of bis(aryloxymethyl)arenes and novolaks therefrom)

IT 208254-04-0P
RL: IMF (Industrial manufacture); PREP (Preparation)
(novolak; preparation of bis(aryloxymethyl)arenes and novolaks therefrom)

IT 208518-22-3P 208534-89-8P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of bis(aryloxymethyl)arenes and novolaks therefrom)

IT 10403-79-9P, 1,4-Bis(phenoxymethyl)benzene 63405-62-9P, 4,4'-Bis(phenoxymethyl)biphenyl

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of bis(aryloxymethyl)arenes and novolaks therefrom)
IT 108-95-2, Phenol, reactions 623-25-6, 1,4-Bis(chloromethyl)benzene 1667-10-3, 4,4'-Bis(chloromethyl)biphenyl
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of bis(aryloxymethyl)arenes and novolaks therefrom)

L3 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1989:7865 CAPLUS
DN 110:7865
OREF 110:1435a,1438a
ED Entered STN: 06 Jan 1989
TI process for the preparation of aromatic or heteroaromatic diacetic acid esters as monomers
IN Kobayashi, Toshiaki; Abe, Fujiro; Tanaka, Masato
PA Agency of Industrial Sciences and Technology, Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07C069-612
ICS B01J031-22; C07C067-36; C07D333-24
CC 25-18 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 35
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63119441	A	19880524	JP 1986-263265	19861105
JP 06011733	B	19940216		
PRAI JP 1986-263265		19861105		

CLASS

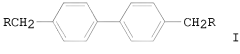
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 63119441	ICM	C07C069-612
	ICS	B01J031-22; C07C067-36; C07D333-24
	IPCI	C07C0069-612 [ICM,4]; C07C0069-00 [ICM,4,C*]; B01J0031-22 [ICS,4]; B01J0031-16 [ICS,4,C*]; C07C0067-36 [ICS,4]; C07C0067-00 [ICS,4,C*]; C07D0333-24 [ICS,4]; C07D0333-00 [ICS,4,C*]
	IPCR	C07D0333-00 [I,C*]; C07D0333-24 [I,A]; B01J0031-00 [I,C*]; B01J0031-00 [I,A]; B01J0031-16 [I,C*]; B01J0031-18 [I,A]; B01J0031-22 [I,A]; C07B0061-00 [I,C*]; C07B0061-00 [I,A]; C07C0067-00 [I,C*]; C07C0067-36 [I,A]; C07C0069-00 [I,C*]; C07C0069-612 [I,A]

OS MARPAT 110:7865
AB Z(CH2CO2R)2 (R = C1-10 alkyl, cycloalkyl, aralkyl, aryl; Z = divalent aromatic or heteroarom. ring which may have inert substituents and/or are polycyclic or condensed ring), useful as monomers, are prepared by treatment
of Z(CH2X)2 (X = halo) with ROH and CO in the presence of basic compds. and Pd-containing catalysts. A mixture of p-C6H4(CH2Cl)2, MeOH,

dicyclohexylmethylamine, and PdCl2(PPh3)2 was autoclaved at 80° under 20 atm CO for 4 h to give 88.8% p-C6H4(CH2CO2Me)2.
ST arom acetate ester prepn monomer; heteroarom diacetic acid ester monomer; halomethylarene alkoxycarbonylation palladium catalyst; arene bishalomethyl alkoxycarbonylation palladium catalyst
IT Bases, uses and miscellaneous
RL: USES (Uses)
(organic, (alkoxy or aryloxy)carbonylation of aromatic or heteroarom. dihalides in presence of)
IT 121-44-8, Triethylamine, uses and miscellaneous
RL: USES (Uses)
((alkoxy or aryloxy)carbonylation of aromatic or heteroarom. dihalides in presence of)
IT 102-82-9, Tributylamine 918-02-5, tert-Butyldimethylamine 4567-22-0, 2,2,5,5-Tetramethylpyrrolidine 7087-68-5, Diisopropylethylamine 7560-83-0
RL: RCT (Reactant); RACT (Reactant or reagent)
((alkoxy or aryloxy)carbonylation of aromatic or heteroarom. dihalides in presence of)
IT 623-24-5, α,α'-Dibromo-p-xylene 1667-10-3, 4,4'-Bis(chloromethyl)biphenyl 1733-76-2, 1,5-Bis(chloromethyl)naphthalene 2362-18-7, 4,4'-Bis(chloromethyl)diphenyl ether 14568-83-3 23063-36-7, α,α'-Dichloro-p-xylene 28569-48-4, 2,5-Bis(chloromethyl)thiophene 31315-55-6, Bis(4-chloromethylphenyl) ketone
RL: RCT (Reactant); RACT (Reactant or reagent)
((alkoxy or aryloxy)carbonylation of, catalysts for)
IT 64-17-5, Ethanol, reactions 67-56-1, Methanol, reactions 67-63-0, Isopropanol, reactions 75-65-0, tert-Butanol, reactions 108-95-2, Phenol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
((alkoxy or aryloxy)carbonylation with, of aromatic or heteroarom. dihalides, catalysts for)
IT 13965-03-2 14221-01-3 29934-17-6 29964-62-3 54081-37-7 57457-62-2 72287-26-4
RL: CAT (Catalyst use); USES (Uses)
(catalyst, for (alkoxy or aryloxy)carbonylation of aromatic or heteroarom. dihalides)
IT 5633-26-1P 7487-16-3P 36076-25-2P 57186-87-5P 115414-88-5P 115414-90-9P 115414-91-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L3 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1988:454438 CAPLUS
DN 109:54438
OREF 109:9167a,9170a
ED Entered STN: 19 Aug 1988
TI Palladium complex-catalyzed carboalkoxylation of bis(chloromethyl)arenes
AU Kobayashi, Toshiaki; Abe, Fujio; Tanaka, Masato
CS Natl. Chem. Lab. Ind., Yatabe, 305, Japan

SO Journal of Molecular Catalysis (1988), 45(1), 91-109
CODEN: JMCADS; ISSN: 0304-5102
DT Journal
LA English
CC 25-18 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
OS CASREACT 109:54438
GI



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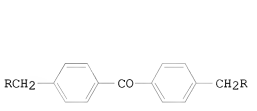

II III

AB Carboalkoxylation of 4-ClCH2C6H4CH2Cl with ROH (R = Me, Et, Me2CH, Me3C, Ph) and CO in the presence of PdCl2(PPh3)2 and N,N-dicyclohexylmethylamine gave diesters 4-RO2CCH2C6H4CH2CO2R as the major products. A similar reaction of 8 other bis(chloromethyl)arenes, e.g. I, II, and III (R = Cl), with MeOH and CO gave the corresponding diesters I, II, and III (R = CO2Me). Reaction parameters, such as auxiliary base, palladium complex catalyst, and solvent, were found to significantly affect the selectivity for diester formation.
ST carboalkoxylation bischloromethylarene alc carbon monoxide; alkoxycarbonylation bischloromethylarene alc; alkoxycarbonylmethylarene; arene bisalkoxycarbonylmethyl; palladium complex alkoxycarbonylation catalyst bischloromethylarene
IT Alkoxycarbonylation
(of bis(chloromethyl)arene by carbon monoxide and alcs.)
IT Alkoxycarbonylation catalysts
(palladium complexes, for bis(chloromethyl)arenes with carbon monoxide and alcs.)
IT 67-56-1, Methanol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkoxycarbonylation by, of bis(chloromethyl)arenes)
IT 64-17-5, Ethanol, reactions 67-63-0, 2-Propanol, reactions 75-65-0, reactions 108-95-2, Phenol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkoxycarbonylation by, of bis(chloromethyl)benzene)
IT 623-24-5 623-25-6, 1,4-Bis(chloromethyl)benzene 1667-10-3 1733-76-2 2362-18-7 10387-13-0 14568-83-3 31315-55-6 115414-79-4
RL: RCT (Reactant); RACT (Reactant or reagent)

(alkoxycarbonylation of, by carbon monoxide and alcs.)
IT 630-08-0, Carbon monoxide, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkoxycarbonylation with alcs., of bis(chloromethyl)arenes)
IT 13965-03-2 14126-26-2 14221-01-3 19978-61-1 29934-17-6
54081-37-7 72287-26-4 79500-51-9
RL: CAT (Catalyst use); USES (Uses)
(catalyst, for alkoxycarbonylation of bis(chloromethyl)arenes by carbon
monoxide and alc.)
IT 57457-62-2P 58465-93-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and catalyst, for alkoxycarbonylation of
bis(chloromethyl)arenes by carbon monoxide and alcs.)
IT 2509-26-4P 5633-26-1P 6770-38-3P 10519-66-1P 23786-13-2P
36076-25-2P 36076-26-3P 52889-83-5P 57186-87-5P 72770-09-3P
94549-58-3P 115414-80-7P 115414-81-8P 115414-82-9P 115414-83-0P
115414-84-1P 115414-85-2P 115414-86-3P 115414-87-4P 115414-88-5P
115414-89-6P 115414-90-9P 115414-91-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 1159-54-2, Tris(p-chlorophenyl)phosphine 13991-08-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dichlorobis(benzonitrile)palladium)
IT 14220-64-5, Dichlorobis(benzonitrile)palladium
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phosphines)

L3 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1979:492531 CAPLUS
DN 91:92531
OREF 91:14959a,14962a
ED Entered STN: 12 May 1984
TI Crosslinked epoxide resin compositions having flame-retardant properties
IN Randell, Donald Richard; Hyde, Thomas Gerald; Lamb, Frank; Clubley, Brian George; Dobinson, Bryan; Bagga, Madan Mohan
PA Ciba-Geigy A.-G., Switz.
SO S. African, 50 pp.
CODEN: SFXXAB
DT Patent
LA English
IC C08G059-00
CC 36-6 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 7802445	A	19790425	ZA 1978-2445	19780428
PRAI GB 1977-18201	A	19770430		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
ZA 7802445	IC	C08G059-00
	IPCI	C08G0059-00
	IPCR	C08G0059-00 [I,C*]; C08G0059-00 [I,A]

AB Epoxy resins with improved flame resistance contain organic P compds. and

synergistic amts. of Z(CH2X)n (Z = aromatic or heterocyclic ring, n ≥2; X = a leaving group). Thus, bisphenol A-epichlorohydrin copolymer [25068-38-6] 100, (PhO)3PO [115-86-6] 50, and 4,4'-bis(methoxymethyl)biphenyl (I) [3753-18-2] 10 parts give a molding with Limiting O Index 53, compared with 27 in the absence of I, and 26.5 in the absence of (PhO)3PO.

ST epoxy resin fireproofing; phosphate ester fireproofing agent; methoxymethylbiphenyl fireproofing agent; biphenyl bismethoxymethyl fireproofing

IT Polyesters, uses and miscellaneous
RL: USES (Uses)
(fire retardants, for epoxy resins)

IT Epoxy resins, uses and miscellaneous
RL: POF (Polymer in formulation); USES (Uses)
(fireproofing agents for, phosphate esters and benzyl alc. derivs. as)

IT Fireproofing agents
(phosphorus compds. and benzyl alc. derivs., for epoxy resins)

IT 71229-81-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(bromination of)

IT 10055-56-8 21646-18-4 63426-82-4
RL: USES (Uses)
(fire retardants, for epoxy resins)

IT 25068-38-6 27103-66-8 28906-98-1 31305-94-9
RL: POF (Polymer in formulation); USES (Uses)
(fireproofing agents for, phosphorus compds. containing synergistic agents as)

IT 91-04-3 589-29-7 1667-10-3 1667-12-5 2203-14-7 2509-47-9 3753-18-2 3883-85-0 4780-79-4 27610-47-5 34899-13-3 54835-54-0 57322-45-9 63043-46-9 63390-96-5 63391-94-6 63405-61-8 63438-89-1 71134-98-0 71134-99-1 71137-73-0 71229-80-6
RL: USES (Uses)
(fireproofing agents, for epoxy resins)

IT 115-86-6 680-31-9, uses and miscellaneous 791-28-6
RL: USES (Uses)
(flame retardants, for epoxy resins, synergists for)

IT 2425-79-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (hydroxymethyl)phenol)

IT 90-01-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with butanediol diglycidyl ether)

L3 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1962:469722 CAPLUS
DN 57:69722
OREF 57:13916b-d
ED Entered STN: 22 Apr 2001
TI Novolak
IN Massengale, John T.; Bender, Frederick C.
PA American Viscose Corp.
SO 4 pp.
DT Patent
LA Unavailable

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CC   43 (Organic Coatings, Inks, and Related Products)
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 3042655                  19620703    US 1960-4009           19600122
CLASS
 PATENT NO.      CLASS  PATENT FAMILY CLASSIFICATION CODES
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 US 3042655      IPCR   C08G0008-00 [I,C*]; C08G0008-00 [I,A]
                 NCL    525/503.000; 525/508.000; 528/137.000; 528/140.000;
                        528/141.000; 528/143.000; 528/144.000; 528/145.000;
                        528/212.000; 528/217.000
AB   A novolak which differs from the conventional Bakelite type has the
     formula I in which n is 4-10.  The substance is made by treating
     phenol dissolved in an organic solvent with
     4,4'-bis(chloromethyl)biphenyl dissolved in the same solvent in the
     presence of a metal halide catalyst, preferably ZnCl2.  HCl is evolved;
     after washing with H2O and distilling the solvent, the novolak is
obtained as
     a residue.  For a molding or coating, thermosetting resin, the novolak
(in
     powder form) is mixed with an aldehyde in an organic solvent, and a
curing
     agent solution is slowly added.  On heat-drying of the reaction mixture,
a
     solid, brittle resin is obtained.  This resin is suitable for molding;
     fillers, a molding catalyst, and a lubricant may be added.  The molded
     thermoset products compare favorably with a Bakelite phenol-HCHO
     resin with respect to resistance to chemical attack.
IT   Coating(s)
        (from phenol condensation products, with
        4,4'-bis(chloromethyl)biphenyl, chemical- and heat-resistant)
IT   Phenol condensation products
        (novolaks, with α,α'-dichloro-p,p'-bitolyl and chemical-and
        heat-resistant molded products therefrom)
IT   1667-10-3, p,p'-Bitolyl, α,α'-dichloro-
        (reaction product with phenol)


=> d his

     (FILE 'HOME' ENTERED AT 15:07:06 ON 10 FEB 2009)

     FILE 'CAPLUS' ENTERED AT 15:07:23 ON 10 FEB 2009
L1             1 S US3042655/PN

     FILE 'REGISTRY' ENTERED AT 15:07:53 ON 10 FEB 2009
L2             1 S 1667-10-3/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY

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L3            13 S L2 AND PHENOL

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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	ENTRY	SESSION
FULL ESTIMATED COST	46.68	55.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.66	-11.48

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NEWS 4	NOV 26	CHEMSAFE now available on STN Easy
NEWS 5	NOV 26	Two new SET commands increase convenience of STN searching
NEWS 6	DEC 01	ChemPort single article sales feature unavailable
NEWS 7	DEC 12	GBFULL now offers single source for full-text coverage of complete UK patent families
NEWS 8	DEC 17	Fifty-one pharmaceutical ingredients added to PS
NEWS 9	JAN 06	The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10	JAN 07	WPIDS, WPINDEX, and WPIX enhanced Japanese Patent Classification Data
NEWS 11	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 12	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS 14	FEB 10	COMPENDEX reloaded and enhanced
NEWS 15	FEB 11	WTEXTILES reloaded and enhanced
NEWS 16	FEB 19	New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS 17	FEB 19	Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,

AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FULL ESTIMATED COST 0.22 0.22

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FILE COVERS 1907 - 22 Feb 2009 VOL 150 ISS 9
FILE LAST UPDATED: 20 Feb 2009 (20090220/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s jp09211860/pn
L1 1 JP09211860/PN

=> d all

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1997:557769 CAPLUS
DN 127:270481
OREF 127:52657a,52660a
ED Entered STN: 01 Sep 1997
TI Epoxy acrylate-based resin compositions, resist ink compositions therefrom, and their cured products
IN Yokoshima, Minoru; Okubo, Tetsuo; Sasahara, Kazunori
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-027
ICS C08F299-02; C08G059-14; C08G059-42; C09D011-10; H05K003-28
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09211860	A	19970815	JP 1996-42233	19960206
<--				
JP 3657049	B2	20050608		
PRAI JP 1996-42233		19960206		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 09211860	ICM	G03F007-027
	ICS	C08F299-02; C08G059-14; C08G059-42; C09D011-10; H05K003-28
	IPCI	G03F0007-027 [ICM,6]; C08F0299-02 [ICS,6]; C08G0059-14 [ICS,6]; C08G0059-42 [ICS,6]; C09D0011-10 [ICS,6]; H05K0003-28 [ICS,6]
	IPCR	G03F0007-027 [I,C*]; G03F0007-027 [I,A]; C08F0290-00 [I,C*]; C08F0290-00 [I,A]; C08F0299-00 [I,C*]; C08F0299-02 [I,A]; C08G0059-00 [I,C*]; C08G0059-14 [I,A]; C08G0059-16 [I,A]; C08G0059-42 [I,A]; C09D0011-10 [I,C*]; C09D0011-10 [I,A]; H05K0003-28 [I,C*]; H05K0003-28 [I,A]

AB Title (resist ink) compns. contain unsatd. polycarboxylic acid-based resins prepared by successive reactions of epoxy resins Q1CH2(B1CH2Q1)nCH2B1CH2Q1 [n = 0-10; Q1 = (un)substituted glycidoxyphenyl(ene); B1 = (un)substituted biphenylene] with unsatd. monocarboxylic acids and then with polybasic carboxylic acid anhydrides. Cured products of above compns., showing excellent bending and solvent resistance, are also claimed.
ST resist ink polycarboxylic epoxy acrylate; printed circuit board resist patterning reliability; solvent resistant wiring photoresist epoxy acrylate; bending resistant wiring photoresist epoxy acrylate
IT Epoxy resins, preparation
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)
(acrylic; unsatd. polycarboxylic acid-based resist ink compns. for crack-free wirings in printed circuit boards)
IT Photoresists
(epoxy acrylate unsatd. polycarboxylic acid-based resist ink compns. for crack-free wirings in printed circuit boards)
IT Printed circuit boards
(unsatd. polycarboxylic acid-based resist ink compns. for crack-free wirings in printed circuit boards)
IT Light-sensitive materials
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(unsatd. polycarboxylic acid-based resist ink compns. for crack-free wirings in printed circuit boards)
IT 195888-19-8P, Bis(methoxymethyl)biphenyl-epichlorohydrin-phenol copolymer acrylate-tetrahydrophthalic anhydride copolymer 195888-21-2P, Bis(methoxymethyl)biphenyl-o-cresol-epichlorohydrin copolymer acrylate-succinic anhydride copolymer 195888-22-3P, Bis(methoxymethyl)biphenyl-epichlorohydrin-phenol copolymer acrylate-Kayarad DPHA-tetrahydrophthalic anhydride copolymer 195888-23-4P, Aronix M 325-bis(methoxymethyl)biphenyl-o-cresol-epichlorohydrin copolymer acrylate-succinic anhydride-U 200AX copolymer 195888-24-5P, Aronix M 325-bis(methoxymethyl)biphenyl-o-cresol-epichlorohydrin copolymer acrylate-bis(methoxymethyl)biphenyl-epichlorohydrin-phenol copolymer acrylate-succinic anhydride-tetrahydrophthalic anhydride-U 200AX copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(unsatd. polycarboxylic acid-based resist ink compns. for crack-free wirings in printed circuit boards)

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	6.62	6.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.82	-0.82

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STRUCTURE FILE UPDATES: 20 FEB 2009 HIGHEST RN 1109311-46-7
DICTIONARY FILE UPDATES: 20 FEB 2009 HIGHEST RN 1109311-46-7

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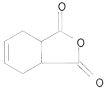
http://www.cas.org/support/stngen/stndoc/properties.html

=> s 195888-19-8; d;s s 195888-21-2; d; s 195888-22-3; d; s 195888-23-4; d; s 195888-24-5; d
L2 1 195888-19-8
(195888-19-8/RN)

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 195888-19-8 REGISTRY
ED Entered STN: 23 Oct 1997
CN 1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro-, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl polymer with (chloromethyl)oxirane and phenol 2-propenoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,1'-Biphenyl, ar,ar'-bis(methoxymethyl)-, polymer with (chloromethyl)oxirane and phenol, 2-propenoate, polymer with 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
CN Oxirane, (chloromethyl)-, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and phenol, 2-propenoate, polymer with 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
CN Phenol, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and (chloromethyl)oxirane, 2-propenoate, polymer with 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
OTHER NAMES:
CN Bis(methoxymethyl)biphenyl-epichlorohydrin-phenol copolymer acrylate-tetrahydrophthalic anhydride copolymer
MF ((C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x . C8 H8 O3 . x C3 H4 O2)x
CI PMS
PCT Polyacrylic, Polyester, Polyester formed, Polyether, Polyether formed, Polyother
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 85-43-8
CMF C8 H8 O3

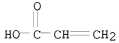


CM 2

CRN 195888-18-7
CMF (C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x . x C3 H4 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

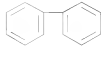


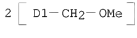
CM 4

CRN 195812-11-4
CMF (C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x
CCI PMS

CM 5

CRN 41376-21-0
CMF C16 H18 O2
CCI IDS



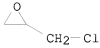


CM 6

CRN 108-95-2
CMF C6 H6 O

CM 7

CRN 106-89-8
CMF C3 H5 Cl O



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
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2706056 S
1 195888-21-2
(195888-21-2/RN)
L3 0 S 195888-21-2
(S(W)195888-21-2)

L3 HAS NO ANSWERS
L3 0 SEA FILE=REGISTRY S 195888-21-2

L4 1 195888-22-3
(195888-22-3/RN)

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 195888-22-3 REGISTRY
ED Entered STN: 23 Oct 1997
CN 1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro-, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl polymer with (chloromethyl)oxirane and phenol 2-propenoate, and 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol] 2-propenoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,1'-Biphenyl, ar,ar'-bis(methoxymethyl)-, polymer with

(chloromethyl)oxirane and phenol, 2-propenoate, polymer with
2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol]
2-propenoate, and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
CN 2-Propenoic acid, ester with
2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-
1,3-propanediol], polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl
polymer with (chloromethyl)oxirane and phenol 2-propenoate, and
3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
CN Oxirane, (chloromethyl)-, polymer with
ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and phenol, 2-propenoate, polymer
with 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol]
2-propenoate, and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
CN Phenol, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and
(chloromethyl)oxirane, 2-propenoate, polymer with
2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol]
2-propenoate, and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
OTHER NAMES:
CN Bis(methoxymethyl)biphenyl-epichlorohydrin-phenol copolymer
acrylate-Kayarad DPHA-tetrahydrophthalic anhydride copolymer
MF ((C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x . C10 H22 O7 . C8 H8 O3 . x C3 H4
O2
. x C3 H4 O2)x
CI PMS
PCT Epoxy resin, Polyacrylic, Polyester, Polyester formed, Polyether,
Polyether formed, Polyother
SR CA
LC STN Files: CA, CAPLUS

CM 1

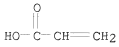
CRN 85-43-8
CMF C8 H8 O3

CM 2

CRN 195888-18-7
CMF (C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x . x C3 H4 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

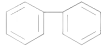


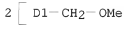
CM 4

CRN 195812-11-4
CMF (C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x
CCI PMS

CM 5

CRN 41376-21-0
CMF C16 H18 O2
CCI IDS



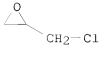


CM 6

CRN 108-95-2
CMF C6 H6 O

CM 7

CRN 106-89-8
CMF C3 H5 Cl O

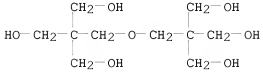


CM 8

CRN 77641-99-7
CMF C10 H22 O7 . x C3 H4 O2

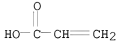
CM 9

CRN 126-58-9
CMF C10 H22 O7



CM 10

CRN 79-10-7
CMF C3 H4 O2



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 1 195888-23-4
(195888-23-4/RN)

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 195888-23-4 REGISTRY
ED Entered STN: 23 Oct 1997
CN Hexanoic acid, 6-[(1-oxo-2-propenyl)oxy]-,
2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl ester, polymer with
ar,ar'-bis(methoxymethyl)-1,1'-biphenyl polymer with
(chloromethyl)oxirane
and 2-methylphenol 2-propenoate, dihydro-2,5-furandione and NK Oligo U 200AX (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,1'-Biphenyl, ar,ar'-bis(methoxymethyl)-, polymer with
(chloromethyl)oxirane and 2-methylphenol, 2-propenoate, polymer with
dihydro-2,5-furandione, 2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-

propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl
6-[(1-oxo-2-propenyl)oxy]hexanoate and U 200AX (9CI)
CN 2,5-Furandione, dihydro-, polymer with
ar,ar'-bis(methoxymethyl)-1,1'-biphenyl polymer with
(chloromethyl)oxirane
and 2-methylphenol 2-propenoate,
2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-
oxo-2-propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl
6-[(1-oxo-2-propenyl)oxy]hexanoate and U 200AX (9CI)
CN Oxirane, (chloromethyl)-, polymer with
ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and 2-methylphenol, 2-propenoate,
polymer with dihydro-2,5-furandione,
2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-propenyl)oxy]ethyl]-1,3,5-
triazin-1(2H)-yl]ethyl 6-[(1-oxo-2-propenyl)oxy]hexanoate and U 200AX
(9CI)
CN Phenol, 2-methyl-, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl
and (chloromethyl)oxirane, 2-propenoate, polymer with
dihydro-2,5-furandione, 2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-
propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl
6-[(1-oxo-2-propenyl)oxy]hexanoate and U 200AX (9CI)
CN U 200AX, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl polymer
with
(chloromethyl)oxirane and 2-methylphenol 2-propenoate,
dihydro-2,5-furandione and
2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-
propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl
6-[(1-oxo-2-propenyl)oxy]hexanoate (9CI)
OTHER NAMES:
CN Aronix M 325-bis(methoxymethyl)biphenyl-o-cresol-epichlorohydrin
copolymer
acrylate-succinic anhydride-U 200AX copolymer
MF (C24 H31 N3 O11 . (C16 H18 O2 . C7 H8 O . C3 H5 Cl O)x . C4 H4 O3 . x C3
H4 O2 . Unspecified)x
CI PMS
PCT Manual component, Polyacrylic, Polyester, Polyester formed, Polyether,
Polyether formed, Polyother
SR CA
LC STN Files: CA, CAPLUS

CM 1

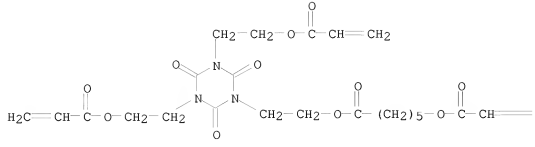
CRN 163184-04-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 106556-00-7
CMF C24 H31 N3 O11

PAGE 1-A



PAGE 1-B

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CM 3

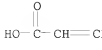
CRN 108-30-5
CMF C4 H4 O3

CM 4

CRN 195888-20-1
CMF (C16 H18 O2 . C7 H8 O . C3 H5 Cl O)x . x C3 H4 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

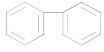


CM 6

CRN 195812-12-5
CMF (C16 H18 O2 . C7 H8 O . C3 H5 Cl O)x
CCI PMS

CM 7

CRN 41376-21-0
CMF C16 H18 O2
CCI IDS



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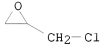
CM 8

CRN 106-89-8
CMF C3 H5 Cl O



CM 9

CRN 95-48-7
CMF C7 H8 O

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 1 195888-24-5
(195888-24-5/RN)

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 195888-24-5 REGISTRY
ED Entered STN: 23 Oct 1997
CN Hexanoic acid, 6-[(1-oxo-2-propenyl)oxy]-,
2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl ester, polymer with
ar,ar'-bis(methoxymethyl)-1,1'-biphenyl polymer with (chloromethyl)oxirane
and 2-methylphenol 2-propenoate, ar,ar'-bis(methoxymethyl)-1,1'-biphenyl polymer with (chloromethyl)oxirane and phenol 2-propenoate, dihydro-2,5-furandione, NK Oligo U 200AX and
3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,1'-Biphenyl, ar,ar'-bis(methoxymethyl)-, polymer with
(chloromethyl)oxirane and 2-methylphenol, 2-propenoate, polymer contg. (9CI)
CN 1,1'-Biphenyl, ar,ar'-bis(methoxymethyl)-, polymer with
(chloromethyl)oxirane and phenol, 2-propenoate, polymer contg. (9CI)
CN 1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro-, polymer contg. (9CI)
CN 2,5-Furandione, dihydro-, polymer contg. (9CI)
CN Oxirane, (chloromethyl)-, polymer with
ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and 2-methylphenol, 2-propenoate, polymer contg. (9CI)
CN Oxirane, (chloromethyl)-, polymer with
ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and phenol, 2-propenoate, polymer contg. (9CI)
CN Phenol, 2-methyl-, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and (chloromethyl)oxirane, 2-propenoate, polymer contg. (9CI)
CN Phenol, polymer with ar,ar'-bis(methoxymethyl)-1,1'-biphenyl and (chloromethyl)oxirane, 2-propenoate, polymer contg. (9CI)
CN U 200AX, polymer contg. (9CI)
OTHER NAMES:
CN Aronix M 325-bis(methoxymethyl)biphenyl-o-cresol-epichlorohydrin copolymer
acrylate-bis(methoxymethyl)biphenyl-epichlorohydrin-phenol copolymer
acrylate-succinic anhydride-tetrahydrophthalic anhydride-U 200AX copolymer
MF (C24 H31 N3 O11 . (C16 H18 O2 . C7 H8 O . C3 H5 Cl O)x . (C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x . C8 H8 O3 . C4 H4 O3 . x C3 H4 O2 . x C3 H4 O2 . Unspecified)x
CI PMS
PCT Manual component, Polyacrylic, Polyester, Polyester formed, Polyether, Polyether formed, Polyother
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 163184-04-1
CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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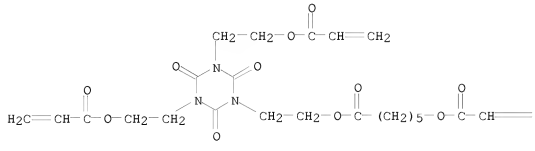
CRN 106556-00-7
CMF C24 H31 N3 O11

PAGE 1-A



PAGE 1-B

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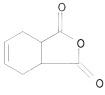
CRN 108-30-5
CMF C4 H4 O3

CM 4

CRN 85-43-8
CMF C8 H8 O3

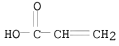


CM 5

CRN 195888-20-1
CMF (C16 H18 O2 . C7 H8 O . C3 H5 Cl O)x . x C3 H4 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2



CM 7

CRN 195812-12-5
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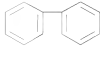
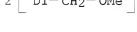
CCI PMS

CM 8

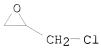
CRN 41376-21-0
CMF C16 H18 O2
CCI IDS





CM 9

CRN 106-89-8
CMF C3 H5 Cl O



CM 10

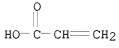
CRN 95-48-7
CMF C7 H8 O

CM 11

CRN 195888-18-7
CMF (C16 H18 O2 . C6 H6 O . C3 H5 Cl O)x . x C3 H4 O2

CM 12

CRN 79-10-7
CMF C3 H4 O2



CM 13

CRN 195812-11-4
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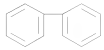
CCI PMS

CM 14

CRN 41376-21-0
CMF C16 H18 O2
CCI IDS



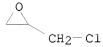
2 [D1—CH_2—OMe]

CM 15

CRN 108-95-2
CMF C6 H6 O

CM 16

CRN 106-89-8
CMF C3 H5 Cl O



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> log y

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FULL ESTIMATED COST	16.43	23.27
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.82

STN INTERNATIONAL LOGOFF AT 12:46:29 ON 22 FEB 2009

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptaul56cxh

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	NOV 21	CAS patent coverage to include exemplified prophetic substances identified in English-, French-, German-, and Japanese-language basic patents from 2004-present
NEWS 3	NOV 26	MARPAT enhanced with FSORT command
NEWS 4	NOV 26	CHEMSAFE now available on STN Easy
NEWS 5	NOV 26	Two new SET commands increase convenience of STN searching
NEWS 6	DEC 01	ChemPort single article sales feature unavailable
NEWS 7	DEC 12	GBFULL now offers single source for full-text coverage of complete UK patent families
NEWS 8	DEC 17	Fifty-one pharmaceutical ingredients added to PS
NEWS 9	JAN 06	The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10	JAN 07	WPIDS, WPINDEX, and WPIX enhanced Japanese Patent Classification Data
NEWS 11	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 12	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS 14	FEB 10	COMPENDEX reloaded and enhanced
NEWS 15	FEB 11	WTEXTILES reloaded and enhanced
NEWS 16	FEB 19	New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS 17	FEB 19	Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:37:47 ON 22 FEB 2009

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FULL ESTIMATED COST 0.22 0.22

FILE 'CAPLUS' ENTERED AT 15:37:56 ON 22 FEB 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 22 Feb 2009 VOL 150 ISS 9
FILE LAST UPDATED: 20 Feb 2009 (20090220/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1 1 JP11140144/PN

=> d all

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1999:331367 CAPLUS
DN 131:26725
ED Entered STN: 28 May 1999
TI Epoxy resin (meth)acrylate compositions, their cured products, and printed
circuit boards therewith
IN Yokoshima, Minoru; Ohkubo, Tetsuo; Sasahara, Kazunori
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08F290-06
ICS C08F020-30; C08F299-02; C08G059-14; C08G059-17; G03F007-027; G03F007-038; H05K003-18; H05K003-28
CC 76-14 (Electric Phenomena)
Section cross-reference(s): 38, 74
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11140144	A	19990525	JP 1997-316649	19971104

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PRAI JP 1997-316649 19971104
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	ICS	C08F020-30; C08F299-02; C08G059-14; C08G059-17; G03F007-027; G03F007-038; H05K003-18; H05K003-28
	IPCI	C08F0290-06 [ICM,6]; C08F0020-30 [ICS,6]; C08F0299-02 [ICS,6]; C08G0059-14 [ICS,6]; C08G0059-17 [ICS,6]; G03F0007-027 [ICS,6]; G03F0007-038 [ICS,6]; H05K0003-18 [ICS,6]; H05K0003-28 [ICS,6]
	IPCR	C08F0020-00 [I,C*]; C08F0020-30 [I,A]; C08F0290-00 [I,C*]; C08F0290-06 [I,A]; C08F0299-00 [I,C*]; C08F0299-02 [I,A]; C08G0059-00 [I,C*]; C08G0059-14 [I,A]; C08G0059-17 [I,A]; G03F0007-027 [I,A]; G03F0007-027 [I,C*]; G03F0007-038 [I,A]; G03F0007-038 [I,C*]; H05K0003-18 [I,A]; H05K0003-18 [I,C*]; H05K0003-28 [I,A]; H05K0003-28 [I,C*]

AB Claimed compns., showing excellent heat, solvent, and solder resistance and useful for permanent resists, comprise (A) epoxy resin (meth)acrylates prepared from GC6H4(CH2Q2CH2C6H3G)nCH2Q2C6H4G (I; G = glycidoxy; Q = phenylene; n ≥ 0) and unsatd. monocarboxylic acids and (B) dilutants. Also claimed are compns. comprising (A') carboxy-containing epoxy resin (meth)acrylates prepared from A and polybasic acid anhydrides and (B).

Thus, a composition of 10:10 (equiv) NC 3000P (I) acrylate 154, propylene glycol monomethyl ether acetate 20, Kayarad DPHA (dipentaerythritol acrylate) 5, EOCN 104S (cresol novolak) 20, benzyl di-Me ketal 3, Aerosil 380 (SiO2) 3, 2,4-diethylthioxanthone 0.5, melamine 3, dicyandiamide 2, and SiO2 35 parts was applied on a laminated board, exposed via a photomask, developed with an aqueous Na2CO3 solution, exposed with UV, annealed at 150°, and immersed in an electroless Cu plating solution to give a printed circuit board showing excellent pattern resolution, good solder resistance (JIS C 6481), and no blistering nor peeling by 20-min immersion in Me2CO.

ST epoxy resin acrylate printed circuit resist; permanent resist developability epoxy resin acrylate; hydrophthalic anhydride epoxy

acrylate permanent resist
IT Epoxy resins, uses
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(acrylic; epoxy resin (meth)acrylates with biphenylene structure for permanent resists with good solder and heat resistance)
IT Heat-resistant materials
Heat-resistant materials
(chemical resistant; epoxy resin (meth)acrylates with biphenylene structure for permanent resists with good solder and heat resistance)
IT Photoimaging materials
Photoresists
Printed circuit boards
(epoxy resin (meth)acrylates with biphenylene structure for permanent resists with good solder and heat resistance)
IT Phenolic resins, uses
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(epoxy, novolak; epoxy resin (meth)acrylates with biphenylene structure
for permanent resists with good solder and heat resistance)
IT Chemically resistant materials
Chemically resistant materials
(heat-resistant; epoxy resin (meth)acrylates with biphenylene structure
for permanent resists with good solder and heat resistance)
IT Epoxy resins, uses
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(phenolic, novolak; epoxy resin (meth)acrylates with biphenylene structure for permanent resists with good solder and heat resistance)
IT 84540-57-8, Propylene glycol monomethyl ether acetate
RL: TEM (Technical or engineered material use); USES (Uses)
(dilutants; epoxy resin (meth)acrylates with biphenylene structure for permanent resists with good solder and heat resistance)
IT 226083-26-7P, NC 3000P acrylate polymer with tetrahydrophthalic anhydride
RL: PNU (Preparation, unclassified); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(epoxy resin (meth)acrylates with biphenylene structure for permanent resists with good solder and heat resistance)
IT 77641-99-7, Kayarad DPHA 85305-70-0, EOCN 104S
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(epoxy resin (meth)acrylates with biphenylene structure for permanent resists with good solder and heat resistance)

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	6.12	6.34

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

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                                                          ENTRY    SESSION
CA SUBSCRIBER PRICE                                       -0.82      -0.82

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DICTIONARY FILE UPDATES:  20 FEB 2009  HIGHEST RN 1109311-46-7

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=> S 226083-26-7/RN

L2            1 226083-26-7/RN

=> SET NOTICE 1 DISPLAY

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=> D L2 SQIDE 1-

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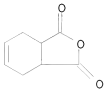
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   226083-26-7  REGISTRY
CN   1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro-, polymer with NC 3000P
     2-propenoate (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   NC 3000P, 2-propenoate, polymer with
     3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI)
OTHER NAMES:
CN   NC 3000P acrylate polymer with tetrahydrophthalic anhydride
MF   (C8 H8 O3 . C3 H4 O2 . x Unspecified)x
CI   PMS
PCT  Manual component, Polyacrylic, Polyother
```

SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)

CM 1

CRN 85-43-8
CMF C8 H8 O3



CM 2

CRN 226083-25-6
CMF C3 H4 O2 . x Unspecified

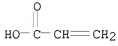
CM 3

CRN 225919-17-5
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 79-10-7
CMF C3 H4 O2



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     2.53       8.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -0.82

STN INTERNATIONAL LOGOFF AT 15:39:00 ON 22 FEB 2009


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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page for STN Seminar Schedule - N. America
 NEWS  2  NOV 21  CAS patent coverage to include exemplified prophetic
                  substances identified in English-, French-, German-,
                  and Japanese-language basic patents from 2004-present
 NEWS  3  NOV 26  MARPAT enhanced with FSORT command
 NEWS  4  NOV 26  CHEMSAFE now available on STN Easy
 NEWS  5  NOV 26  Two new SET commands increase convenience of STN
                  searching
 NEWS  6  DEC 01  ChemPort single article sales feature unavailable
 NEWS  7  DEC 12  GBFULL now offers single source for full-text
                  coverage of complete UK patent families
 NEWS  8  DEC 17  Fifty-one pharmaceutical ingredients added to PS
 NEWS  9  JAN 06  The retention policy for unread STNmail messages
                  will change in 2009 for STN-Columbus and STN-Tokyo
 NEWS 10  JAN 07  WPIDS, WPINDEX, and WPIX enhanced Japanese Patent
                  Classification Data
 NEWS 11  FEB 02  Simultaneous left and right truncation (SLART) added
                  for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
 NEWS 12  FEB 02  GENBANK enhanced with SET PLURALS and SET SPELLING
 NEWS 13  FEB 06  Patent sequence location (PSL) data added to USGENE
 NEWS 14  FEB 10  COMPENDEX reloaded and enhanced
 NEWS 15  FEB 11  WTEXTILES reloaded and enhanced
 NEWS 16  FEB 19  New patent-examiner citations in 300,000 CA/CAplus
                  patent records provide insights into related prior
                  art
 NEWS 17  FEB 19  Increase the precision of your patent queries -- use
```

terms from the IPC Thesaurus, Version 2009.01

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE 'HOME' ENTERED AT 16:30:54 ON 22 FEB 2009

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.22 0.22

FILE 'CAPLUS' ENTERED AT 16:31:09 ON 22 FEB 2009
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FILE COVERS 1907 - 22 Feb 2009 VOL 150 ISS 9
FILE LAST UPDATED: 20 Feb 2009 (20090220/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s jp2002128865
L1             0 JP2002128865

=> s jp2002128865/pn
L2             1 JP2002128865/PN

=> d all

L2   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2002:347414  CAPLUS
DN   136:361823
ED   Entered STN:  09 May 2002
TI   Photoresist compositions with excellent alkali developability
IN   Otani, Kazuo; Saito, Takeshi
PA   Showa Highpolymer Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 14 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
IC   ICM  C08G059-42
     ICS  G03F007-027; H05K003-28; H05K003-46
CC   74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
     Section cross-reference(s): 38, 76
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   JP 2002128865        A     20020509    JP 2000-331658         20001031
<--
PRAI JP 2000-331658             20001031
CLASS
 PATENT NO.       CLASS  PATENT FAMILY CLASSIFICATION CODES
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 JP 2002128865    ICM    C08G059-42
                  ICS    G03F007-027; H05K003-28; H05K003-46
                  IPCI   C08G0059-42 [ICM,7]; C08G0059-00 [ICM,7,C*];
                         G03F0007-027 [ICS,7]; H05K0003-28 [ICS,7]; H05K0003-46
                         [ICS,7]
                  IPCR   G03F0007-027 [I,C*]; G03F0007-027 [I,A]; C08G0059-00
                         [I,C*]; C08G0059-42 [I,A]; H05K0003-28 [I,C*];
                         H05K0003-28 [I,A]; H05K0003-46 [I,C*]; H05K0003-46
                         [I,A]
AB   The compns., useful for solder resists for printed circuit boards,
contain
     curable polymers (A) prepared by reaction of phenolic resins, compds.
having
     radically polymerizable unsatd. groups and epoxy groups, and compds.
     having alc. OH groups and further reaction of the products with saturated
     and/or unsatd. polybasic acid anhydrides, polymers (B) prepared by
polymerization
     of radically polymerizable unsatd. compds. and reaction (optional) of the
     resulting polymers with saturated and/or unsatd. polybasic acid
anhydrides,
     epoxy resins (C), photopolymn. initiators (D), and polymerizable unsatd.
```

compds. and/or solvents. Their cured products show good adhesion to substrates, flexibility, and solder heat resistance.
ST photoresist phenolic resin modification alkali development; solder photoresist flexibility printed circuit board; curing solder resist ink heat resistance
IT Printed circuit boards
(photoresist compns. with good alkali developability for printed circuit boards)
IT Epoxy resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compns. with good alkali developability for printed circuit boards)
IT Solder resists
(photoresists; photoresist compns. with good alkali developability for printed circuit boards)
IT Phenolic resins, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reaction products with glycidyl methacrylate, glycidol, and tetrahydrophthalic anhydride; photoresist compns. with good alkali developability for printed circuit boards)
IT Photoresists
(solder; photoresist compns. with good alkali developability for printed circuit boards)
IT 15625-89-5, Light Acrylate TMP-A
RL: TEM (Technical or engineered material use); USES (Uses)
(diluent; photoresist compns. with good alkali developability for printed circuit boards)
IT 85-43-8DP, Tetrahydrophthalic anhydride, reaction products with phenolic resins 106-91-2DP, Glycidyl methacrylate, reaction products with phenolic resin 556-52-5DP, Glycidol, reaction products with phenolic resin 25053-96-7DP, Shonol CRG 951, reaction products with glycidyl methacrylate, glycidol, and tetrahydrophthalic anhydride 54140-67-9DP, Denacol EX 145, reaction products with phenolic resin 88528-24-9P, 2-Ethylhexyl methacrylate-methacrylic acid-styrene copolymer ester with glycidyl methacrylate 180980-07-8P, Butyl methacrylate-glycidyl methacrylate-styrene copolymer acrylate 421557-24-6P, Butyl methacrylate-2-hydroxyethyl methacrylate-styrene copolymer ester with tetrahydrophthalic anhydride 421557-25-7P, 2-Ethylhexyl acrylate-glycidyl methacrylate-styrene copolymer ester with acrylic acid and tetrahydrophthalic anhydride 421557-26-8P, Butyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer, carbamate with isocyanatoethyl methacrylate, ester with tetrahydrophthalic anhydride
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoresist compns. with good alkali developability for printed circuit boards)
IT 28825-96-9, Tepic S
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compns. with good alkali developability for printed circuit boards)

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	8.86	9.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.82	-0.82

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DICTIONARY FILE UPDATES: 20 FEB 2009 HIGHEST RN 1109311-46-7

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http://www.cas.org/support/stngen/stndoc/properties.html

=> S 28825-96-9/RN

L3 1 28825-96-9/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
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=> D L3 SQIDE 1-

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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
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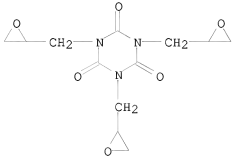
L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 28825-96-9 REGISTRY
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(2-oxiranylmethyl)-,
homopolymer (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-,
homopolymer (9CI)

CN s-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(2,3-epoxypropyl)-, polymers (8CI)
OTHER NAMES:
CN Araldite 710
CN Araldite 813
CN Araldite PT 810
CN Araldite PT 816
CN Araldite TGIC
CN Epikote RXE 15
CN ETs
CN ETs (cyanuric acid derivative)
CN Glycidyl isocyanurate polymer
CN Metallon E 5010
CN Poly(glycidyl isocyanurate)
CN PP 9210D
CN PPT 12544D
CN PT 710
CN PT 810
CN T 1005
CN T 810
CN T 810 (hardener)
CN TEPIC
CN TEPIC-G
CN TEPIC-H
CN TEPIC-L
CN TEPIC-P
CN TEPIC-S
CN TEPIC-SP
CN TGI X
CN TGIC
CN Triglycidyl isocyanurate homopolymer
CN Triglycidyl isocyanurate polymer
CN Vestagon BF 1430
CN XB 2615
DR 919110-41-1, 919110-70-6, 521264-86-8, 57608-83-0, 97397-21-2, 94699-45-3, 84683-95-4
MF (C12 H15 N3 O6)x
CI PMS, COM
PCT Epoxy resin, Polyisocyanurate
LC STN Files: AGRICOLA, BIOSIS, CA, CAPLUS, CIN, IFICDB, IFIPAT, IFIUDB, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL, USPATOLD
DT.CA CAplus document type: Conference; Journal; Patent; Report
RL.P Roles from patents: PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation); PRP (Properties); USES (Uses)

CM 1

CRN 2451-62-9
CMF C12 H15 N3 O6



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

438 REFERENCES IN FILE CA (1907 TO DATE)
64 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
438 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.53	11.61
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.82

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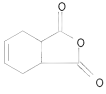
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s 85-43-8; d; s 106-91-2; d ; s 556-52-5; d; s 25053-96-7; d; s
54140-67-9; d; s 88528-24-9; d ; s 180980-07-8;d; s 421557-24-6; d
L4   1 85-43-8
                (85-43-8/RN)

L4   ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN   85-43-8 REGISTRY
ED   Entered STN: 16 Nov 1984
CN   1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   4-Cyclohexene-1,2-dicarboxylic anhydride (8CI)
OTHER NAMES:
CN   Δ4-Tetrahydrophthalic anhydride
CN   1,2,3,6-Tetrahydrophthalic acid anhydride
CN   1,2,3,6-Tetrahydrophthalic anhydride
CN   3a,4,7,7a-Tetrahydro-1,3-isobenzofurandione
CN   4-Cyclohexene-1,2-dicarboxylic acid anhydride
CN   Cyclohexene-4,5-dicarboxylic anhydride
CN   Maleic anhydride-butadiene adduct
CN   NSC 82642
CN   Rikacid TH
CN   Rikacid THPA
CN   Tetrahydrophthalic acid anhydride
CN   Tetrahydrophthalic anhydride
DR   57570-09-9, 27936-16-9
MF   C8 H8 O3
CI   COM
LC   STN Files: AGRICOLA, AQUIRE, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, EMBASE, GMELIN*,
       HSDB*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PROMT, RTECS*, SPECINFO,
       TOXCENTER, ULIDAT, USPAT2, USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)



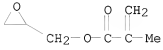
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1719 REFERENCES IN FILE CA (1907 TO DATE)
737 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1721 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 1 106-91-2
(106-91-2/RN)

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 106-91-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester (9CI)
CN Methacrylic acid, 2,3-epoxypropyl ester (6CI, 7CI, 8CI)
OTHER NAMES:
CN (±)-Glycidyl methacrylate
CN 2,3-Epoxypropyl methacrylate
CN 2-Methylacrylic acid oxiranylmethyl ester
CN 2-[(Methacryloyloxy)methyl]oxirane
CN 3-Methacryloyloxy-1,2-epoxypropane
CN Acryester G
CN Blemmer G
CN Blemmer GH-LC
CN Blemmer GMA
CN Blemmer GP
CN Blemmer GS
CN Epoxypropyl methacrylate
CN Glycidol methacrylate
CN Glycidyl α-methylacrylate
CN Glycidyl methacrylate
CN Light Ester G
CN Methacryloyloxymethyloxirane
CN NSC 24156
CN NSC 67195
CN Sartomer 379
CN SR 379
CN SY-Monomer G
DR 865699-83-8, 122785-80-2, 126872-19-3, 55279-88-4, 96778-02-8, 98104-93-9,

89678-75-1, 117955-24-5, 169957-95-3, 201732-55-0, 203300-26-9, 210093-72-4
MF C7 H10 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6026 REFERENCES IN FILE CA (1907 TO DATE)
2975 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6034 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 1 556-52-5
(556-52-5/RN)

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 556-52-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Oxiranemethanol (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Propanol, 2,3-epoxy- (7CI, 8CI)
CN Glycidol (6CI)
CN Oxiranemethanol (9CI)
OTHER NAMES:
CN (±)-2,3-Epoxy-1-propanol
CN (±)-Glycidol
CN (RS)-Glycidol
CN 1,2-Epoxy-3-hydroxypropane
CN 1-Hydroxy-2,3-epoxypropane
CN 2,3-Epoxy-1-propanol
CN 2-(Hydroxymethyl)oxirane
CN 3-Hydroxy-1,2-epoxypropane
CN 3-Hydroxypropylene oxide
CN Allyl alcohol oxide
CN dl-Glycidol
CN Epihydrin alcohol

CN Epiol OH
CN Glycide
CN Glycidyl alcohol
CN NSC 46096
CN Oxiran-2-ylmethanol
CN Oxiranylmethanol
CN Racemic glycidol
DR 98913-54-3, 61915-27-3
MF C3 H6 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO,
CA,
CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN,
CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE,
TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3796 REFERENCES IN FILE CA (1907 TO DATE)
912 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3805 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 1 25053-96-7
(25053-96-7/RN)

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 25053-96-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Formaldehyde, polymer with 2-methylphenol (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN o-Cresol, polymer with formaldehyde (8CI)
CN Phenol, 2-methyl-, polymer with formaldehyde (9CI)
OTHER NAMES:
CN AG-O 2
CN AI-O 2
CN Bakelite EPR 680
CN BTB 28
CN CRG 951
CN CRJ 406

CN D 5
CN D 5 (phenolic resin)
CN Durite SD 423A
CN Formaldehyde-2-methylphenol copolymer
CN Formaldehyde-o-cresol copolymer
CN Formaldehyde-o-cresol polymer
CN Formaldehyde-o-cresol resin
CN H 1
CN H 1 (phenolic resin)
CN KA 1165
CN KA 1174
CN KCE-F 2104
CN KP 7516
CN KP 7516 (phenolic resin)
CN KP 757G
CN o-Cresol-formaldehyde copolymer
CN o-Cresol-formaldehyde polymer
CN o-Cresol-paraformaldehyde copolymer
CN OCN
CN OCN 100
CN OCN 120
CN OCN 130
CN Phenolite KA 1174
CN Phenolite TD 2697
CN Plyophen KA 1162
CN Plyophen ZA 1165
CN Resitop PS 6909
CN Resitop PS 6937
CN SD 423A
CN Shonol CRG 951
CN SKO 1
CN Varcum 29-801
DR 126039-30-3, 125004-50-4, 63284-42-4, 102324-87-8, 99280-32-7, 192464-40-7, 374107-90-1, 467219-46-1, 682333-39-7
MF (C7 H8 O . C H2 O)x
CI PMS, COM
PCT Phenolic resin
LC STN Files: AGRICOLA, CA, CAPLUS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USPAT2, USPATFULL, USPATOLD
Other Sources: DSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 95-48-7
CMF C7 H8 O

CM 2

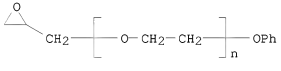
CRN 50-00-0
CMF C H2 O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1003 REFERENCES IN FILE CA (1907 TO DATE)
707 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1003 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L8 1 54140-67-9
(54140-67-9/RN)

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 54140-67-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN Poly(oxy-1,2-ethanediyl), α-(2-oxiranylmethyl)-ω-phenoxy- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Poly(oxy-1,2-ethanediyl), α-(oxiranylmethyl)-ω-phenoxy- (9CI)
OTHER NAMES:
CN Denacol EX 145
CN EX 145
CN Polyethylene glycol phenyl glycidyl ether
DR 705265-20-9, 125370-59-4, 134247-91-9, 114732-91-1, 111426-68-7, 153651-22-0, 143256-18-2
MF (C2 H4 O)n C9 H10 O2
CI PMS, COM
PCT Polyether
LC STN Files: CA, CAPLUS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL



68 REFERENCES IN FILE CA (1907 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
68 REFERENCES IN FILE CAPLUS (1907 TO DATE)

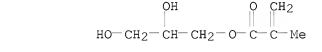
L9 1 88528-24-9

(88528-24-9/RN)

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 88528-24-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propenoic acid, 2-ethylhexyl ester, polymer with ethenylbenzene and 2-methyl-2-propenoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI)
CN Benzene, ethenyl-, polymer with 2-ethylhexyl 2-propenoate and 2-methyl-2-propenoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI)
OTHER NAMES:
CN 2-Ethylhexyl methacrylate-methacrylic acid-styrene copolymer ester with glycidyl methacrylate
MF (C11 H20 O2 . C8 H8 . C4 H6 O2)x . x C7 H12 O4
PCT Polyacrylic, Polystyrene
LC STN Files: CA, CAPLUS

CM 1

CRN 5919-74-4
CMF C7 H12 O4

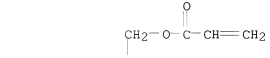


CM 2

CRN 26636-08-8
CMF (C11 H20 O2 . C8 H8 . C4 H6 O2)x
CCI PMS

CM 3

CRN 103-11-7
CMF C11 H20 O2



CM 4

CRN 100-42-5
CMF C8 H8

CM 5

CRN 79-41-4
CMF C4 H6 O2

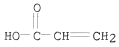
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 1 180980-07-8
(180980-07-8/RN)

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 180980-07-8 REGISTRY
ED Entered STN: 19 Sep 1996
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with butyl 2-methyl-2-propenoate and ethenylbenzene, 2-propenoate (9CI)
CN Benzene, ethenyl-, polymer with butyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI)
OTHER NAMES:
CN Butyl methacrylate-glycidyl methacrylate-styrene copolymer acrylate
MF (C8 H14 O2 . C8 H8 . C7 H10 O3)x . x C3 H4 O2
CI COM
PCT Polyacrylic, Polystyrene
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 79-10-7
CMF C3 H4 O2

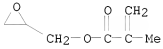


CM 2

CRN 55492-07-4
CMF (C8 H14 O2 . C8 H8 . C7 H10 O3)x
CCI PMS

CM 3

CRN 106-91-2
CMF C7 H10 O3

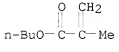


CM 4

CRN 100-42-5
CMF C8 H8

CM 5

CRN 97-88-1
CMF C8 H14 O2



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L11 1 421557-24-6
(421557-24-6/RN)

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 421557-24-6 REGISTRY
ED Entered STN: 24 May 2002
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene and 2-hydroxyethyl 2-methyl-2-propenoate, hydrogen 4-cyclohexene-1,2-dicarboxylate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Butyl methacrylate-2-hydroxyethyl methacrylate-styrene copolymer ester with tetrahydrophthalic anhydride
MF (C8 H14 O2 . C8 H8 . C6 H10 O3)x . x C8 H10 O4
PCT Polyacrylic, Polystyrene
SR CA
LC STN Files: CA, CAPLUS

CM 1

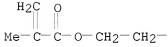
CRN 88-98-2
CMF C8 H10 O4

CM 2

CRN 31423-16-2
CMF (C8 H14 O2 . C8 H8 . C6 H10 O3)x
CCI PMS

CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

CRN 100-42-5
CMF C8 H8

CM 5

CRN 97-88-1
CMF C8 H14 O2

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 421557-25-7; d; s 421557-26-8; d
L12 1 421557-25-7
(421557-25-7/RN)

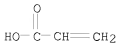
L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 421557-25-7 REGISTRY
ED Entered STN: 24 May 2002
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate, hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Ethylhexyl acrylate-glycidyl methacrylate-styrene copolymer ester with acrylic acid and tetrahydrophthalic anhydride
MF (C11 H20 O2 . C8 H8 . C7 H10 O3)x . x C8 H10 O4 . x C3 H4 O2
PCT Polyacrylic, Polystyrene
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 88-98-2
CMF C8 H10 O4

CM 2

CRN 79-10-7
CMF C3 H4 O2

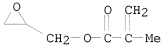


CM 3

CRN 30814-77-8
CMF (C11 H20 O2 . C8 H8 . C7 H10 O3)x
CCI PMS

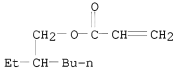
CM 4

CRN 106-91-2
CMF C7 H10 O3



CM 5

CRN 103-11-7
CMF C11 H20 O2



CM 6

CRN 100-42-5
CMF C8 H8

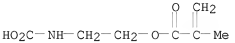
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 1 421557-26-8
(421557-26-8/RN)

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 421557-26-8 REGISTRY
ED Entered STN: 24 May 2002
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate and ethenylbenzene, hydrogen 4-cyclohexene-1,2-dicarboxylate [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Butyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer, carbamate with isocyanatoethyl methacrylate, ester with tetrahydrophthalic anhydride
MF C8 H10 O4 . x (C8 H8 . C7 H12 O2 . C6 H10 O3)x . x C7 H11 N O4
PCT Polyacrylic, Polystyrene
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 96571-20-9
CMF C7 H11 N O4



CM 2

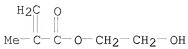
CRN 88-98-2
CMF C8 H10 O4

CM 3

CRN 26916-03-0
CMF (C8 H8 . C7 H12 O2 . C6 H10 O3)x
CCI PMS

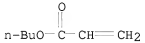
CM 4

CRN 868-77-9
CMF C6 H10 O3



CM 5

CRN 141-32-2
CMF C7 H12 O2



CM 6

CRN 100-42-5
CMF C8 H8

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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     FILE 'CAPLUS' ENTERED AT 16:31:09 ON 22 FEB 2009
L1             0 S JP2002128865
L2             1 S JP2002128865/PN

     FILE 'REGISTRY' ENTERED AT 16:32:03 ON 22 FEB 2009
L3             1 S 28825-96-9/RN
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                 SET NOTICE LOGIN DISPLAY

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L4             1 S 85-43-8
L5             1 S 106-91-2
L6             1 S  556-52-5
L7             1 S 25053-96-7
L8             1 S 54140-67-9
L9             1 S 88528-24-9
L10            1 S 180980-07-8
L11            1 S 421557-24-6
L12            1 S  421557-25-7
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L13 1 S 421557-26-8

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	24.34	35.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.82

STN INTERNATIONAL LOGOFF AT 16:37:36 ON 22 FEB 2009

Connecting via Winsock to STN

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LOGINID:sssptau156cxh

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	NOV 21	CAS patent coverage to include exemplified prophetic substances identified in English-, French-, German-, and Japanese-language basic patents from 2004-present
NEWS 3	NOV 26	MARPAT enhanced with FSORT command
NEWS 4	NOV 26	CHEMSAFE now available on STN Easy
NEWS 5	NOV 26	Two new SET commands increase convenience of STN searching
NEWS 6	DEC 01	ChemPort single article sales feature unavailable
NEWS 7	DEC 12	GBFULL now offers single source for full-text coverage of complete UK patent families
NEWS 8	DEC 17	Fifty-one pharmaceutical ingredients added to PS
NEWS 9	JAN 06	The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10	JAN 07	WPIDS, WPINDEX, and WPIX enhanced Japanese Patent Classification Data
NEWS 11	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 12	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS 14	FEB 10	COMPENDEX reloaded and enhanced
NEWS 15	FEB 11	WTEXTILES reloaded and enhanced
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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * *

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=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.22 0.22

FILE 'CAPLUS' ENTERED AT 17:13:51 ON 22 FEB 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 22 Feb 2009 VOL 150 ISS 9
FILE LAST UPDATED: 20 Feb 2009 (20090220/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate

substance identification.

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L1            1 JP2003082067/PN

=> d all

L1   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2003:216981  CAPLUS
DN   138:245611
ED   Entered STN:  20 Mar 2003
TI   Acrylic resin compositions for solder resists or interlayer dielectrics,
     their cured articles, and products with the cured layers
IN   Koyanagi, Takao; Yokoshima, Minoru
PA   Nippon Kayaku Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 9 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
IC   ICM  C08G059-62
     ICS  C08G059-24; H05K003-28
CC   74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
     Section cross-reference(s): 38
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   JP 2003082067        A     20030319    JP 2001-277588         20010913
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PRAI JP 2001-277588              20010913
CLASS
 PATENT NO.       CLASS   PATENT FAMILY CLASSIFICATION CODES
 --------------   -----   ----------------------------------------------
 JP 2003082067    ICM     C08G059-62
                  ICS     C08G059-24; H05K003-28
                  IPCI    C08G0059-62 [ICM,7]; C08G0059-24 [ICS,7]; C08G0059-00
                          [ICS,7,C*]; H05K0003-28 [ICS,7]
                  IPCR    C08G0059-00 [I,C*]; C08G0059-62 [I,A]; C08G0059-24
                          [I,A]; H05K0003-28 [I,C*]; H05K0003-28 [I,A]
AB   The resin compns. contain (A) oligomers prepd by reacting (a) phenolic
     OH-containing compds. bearing biphenyl backbones and phenol backbones
with (b)
     compds. bearing 1 epoxy group and 1 (meth)acrylate group, (B)
     (meth)acrylate compds. other than A, and as desired (C) epoxy resins and
     (D) photopolymn. initiators.  The compns. have good developability and
     give cured articles having good flexibility, solder resistance, and
     electroless plating resistance, and are useful for solder resists and
     interlayer dielecs for printed circuit boards.
ST   solder resist compn acrylic polymer; interlayer dielec acrylic polymer
     compn; printed circuit solder resist acrylic compn
IT   Dielectric films
     Solder resists
        (acrylic resin compns. with good developability for solder resists or
        interlayer dielecs.)
IT   Printed circuit boards
```

(acrylic resin compns. with good developability for solder resists or interlayer dielecs. for)
IT 71868-10-5, Irgacure 907 82799-44-8, Kayacure DETX-S
RL: CAT (Catalyst use); USES (Uses)
(acrylic resin compns. with good developability for solder resists or interlayer dielecs.)
IT 106-89-8DP, Epichlorohydrin, ether with bisphenol F epoxy resin 58421-55-9DP, glycidyl ether
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic resin compns. with good developability for solder resists or interlayer dielecs.)
IT 77641-99-7, Kayarad DPHA 263363-71-9, Kayarad ZFR 1122
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylic resin compns. with good developability for solder resists or interlayer dielecs.)
IT 106-91-2DP, Glycidyl methacrylate, reaction products with Kayahard HBPN 497835-19-5DP, Kayahard HBPN, reaction products with glycidyl methacrylate
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomeric; acrylic resin compns. with good developability for solder resists or interlayer dielecs.)

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	6.12	6.34

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.82	-0.82

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DICTIONARY FILE UPDATES: 20 FEB 2009 HIGHEST RN 1109311-46-7

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=> S 497835-19-5/RN

L2 1 497835-19-5/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L2 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 497835-19-5 REGISTRY
CN Kayahard HBPN (9CI) (CA INDEX NAME)
ENTE A biphenyl-containing phenolic resin (Nippon Kayaku Co., Ltd.)
MF Unspecified
CI PMS, MAN
PCT Manual registration
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation);
PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> d all 1-3

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 497835-19-5 REGISTRY
ED Entered STN: 11 Mar 2003
CN Kayahard HBPN (9CI) (CA INDEX NAME)
ENTE A biphenyl-containing phenolic resin (Nippon Kayaku Co., Ltd.)
MF Unspecified
CI PMS, MAN

PCT Manual registration
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 138:245611 CA
TI Acrylic resin compositions for solder resists or interlayer dielectrics, their cured articles, and products with the cured layers
IN Koyanagi, Takao; Yokoshima, Minoru
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G059-62
ICS C08G059-24; H05K003-28
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003082067	A	20030319	JP 2001-277588	20010913
PRAI	JP 2001-277588		20010913		

AB The resin compns. contain (A) oligomers prepd by reacting (a) phenolic OH-containing compds. bearing biphenyl backbones and phenol backbones with (b) compds. bearing 1 epoxy group and 1 (meth)acrylate group, (B) (meth)acrylate compds. other than A, and as desired (C) epoxy resins and (D) photopolymn. initiators. The compns. have good developability and give cured articles having good flexibility, solder resistance, and electroless plating resistance, and are useful for solder resists and interlayer dielecs for printed circuit boards.
ST solder resist compn acrylic polymer; interlayer dielec acrylic polymer compn; printed circuit solder resist acrylic compn
IT Dielectric films
Solder resists
(acrylic resin compns. with good developability for solder resists or interlayer dielecs.)
IT Printed circuit boards
(acrylic resin compns. with good developability for solder resists or interlayer dielecs. for)
IT 71868-10-5, Irgacure 907 82799-44-8, Kayacure DETX-S
RL: CAT (Catalyst use); USES (Uses)
(acrylic resin compns. with good developability for solder resists or interlayer dielecs.)

IT 106-89-8DP, Epichlorohydrin, ether with bisphenol F epoxy resin 58421-55-9DP, glycidyl ether
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic resin compns. with good developability for solder resists or interlayer dielecs.)
IT 77641-99-7, Kayarad DPHA 263363-71-9, Kayarad ZFR 1122
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylic resin compns. with good developability for solder resists or interlayer dielecs.)
IT 106-91-2DP, Glycidyl methacrylate, reaction products with Kayahard HBPN 497835-19-5DP, Kayahard HBPN, reaction products with glycidyl methacrylate
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomeric; acrylic resin compns. with good developability for solder resists or interlayer dielecs.)

REFERENCE 2

AN 138:222372 CA
TI Resin composition for solder resists and interlayer dielecs for printed circuit boards and their and cured products
IN Koyanagi, Takao; Yokoshima, Minoru
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08F020-10
ICS C08F002-44; C08F299-02; C08G059-62; G03F007-004; G03F007-027; H05K003-18; H05K003-28; H05K003-46
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 74
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003082025	A	20030319	JP 2001-277555	20010913
PRAI JP 2001-277555		20010913		

AB The compns. comprise (A) phenolic OH-containing compds. having biphenyl backbones and phenol backbones (e.g., Kayahard HBPN), (B) (meth)acrylate compds. [Kayarad DPHA (mixture of dipentaerythritol acrylate)] and (C) epoxy resins (e.g., bisphenol F-epichlorohydrin copolymer). The compns. have good developability, flexibility, solder resistance, and electroless plating resistance.
ST methacrylic polymer solder resist compn; hydroxy polybenzyl epoxy resin interlayer dielec; printed circuit board solder resist interlayer insulator
IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, hydroxy-containing polybenzyl; resin composition for solder resists and interlayer dielecs for printed circuit boards and their and cured

products)
IT Polybenzyls
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy, hydroxy-containing, acrylic-; resin composition for solder resists and
interlayer dielecs for printed circuit boards and their and cured products)
IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polybenzyl-, hydroxy-containing, acrylic-; resin composition for solder resists
and interlayer dielecs for printed circuit boards and their and cured products)
IT Electric insulators
Printed circuit boards
Solder resists
(resin composition for solder resists and interlayer dielecs for printed
circuit boards and their and cured products)
IT 106-89-8DP, Epichlorohydrin, polymers with bisphenol F, acrylic compds. and hydroxy-containing polybenzyls 1333-16-0DP, Bisphenol F, polymers with
epichlorohydrin, acrylic compds. and hydroxy-containing polybenzyls
77641-99-7DP, Kayarad DPHA, polymers with epoxy resins and hydroxy-containing
polybenzyls 217792-29-5DP, polymers with epoxy resins and acrylic compds. 263363-71-9DP, Kayarad ZFR 1122, polymers with epoxy resins and hydroxy-containing polybenzyls 497835-19-5DP, Kayahard HBPN, polymers with
epoxy resins and acrylic compds.
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin composition for solder resists and interlayer dielecs for printed
circuit boards and their and cured products)

REFERENCE 3

AN 138:188701 CA
TI Epoxy resin compositions for optical materials and their cured products
IN Akatsuka, Yasumasa; Oshimi, Katsuhiko
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G059-20
ICS C08G059-62; C08J005-18; G02B001-04; G02C007-02; C08L063-00
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 73
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 2003055437 A 20030226 JP 2001-244322 20010810
PRAI JP 2001-244322 20010810
AB The compns. comprise biphenyl epoxy resins GOC6H4(CH2C6H4C6H4CH2C6H3OG)nH (I; G = glycidyl) and crosslinking agents. Thus, a composition containing NC 3000S (I) 28, Kayahard HBPN [HOC6H4(CH2C6H4C6H4CH2C6H3OH)nH] 24.2, triphenylphosphine 0.28, and MEK 52.5 parts was applied on a PET film, dried, and cured to give a film with Tg 161°, refractive index 1.655, and good flexibility.
ST biphenyl novolak epoxy resin flexible film optical
IT Crosslinking agents
Optical films
Plastic films
(epoxy resin compns. for optical materials)
IT Polybenzyls
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy, hydroxy-containing; epoxy resin compns. for optical materials)
IT Phenolic resins, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy; epoxy resin compns. for optical materials)
IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(phenolic; epoxy resin compns. for optical materials)
IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polybenzyl-, hydroxy-containing; epoxy resin compns. for optical materials)
IT 217792-29-5DP, reaction products with epoxy resins 450336-22-8DP, NC 3000S, reaction products with phenol resins 497835-19-5DP, Kayahard HBPN
, reaction products with epoxy resins 497917-00-7DP, reaction products with phenol resins
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy resin compns. for optical materials)

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(FILE 'HOME' ENTERED AT 17:13:41 ON 22 FEB 2009)

FILE 'CAPLUS' ENTERED AT 17:13:51 ON 22 FEB 2009
L1 1 S JP2003082067/PN

FILE 'REGISTRY' ENTERED AT 17:14:30 ON 22 FEB 2009
L2 1 S 497835-19-5/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

=> log y
COST IN U.S. DOLLARS SINCE FILE TOTAL

	ENTRY	SESSION
FULL ESTIMATED COST	8.76	15.10

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.78	-1.60

STN INTERNATIONAL LOGOFF AT 17:16:14 ON 22 FEB 2009